

## A.S.F. FORK Series

## A.AUTOMATED S.SWITCH F.FORKS

Product  
Catalog

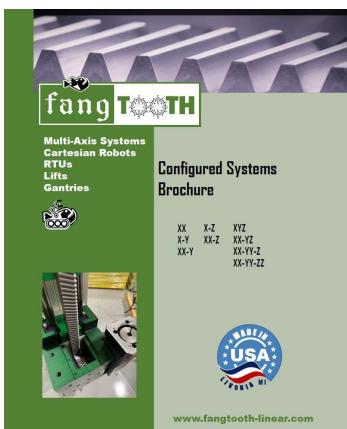
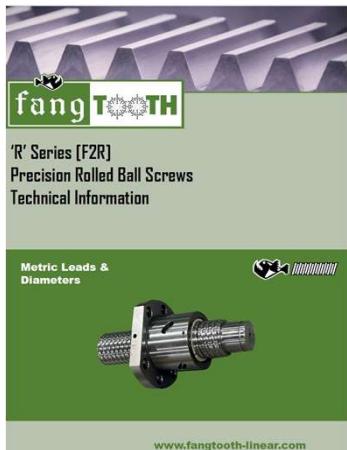


## Other Products



Linear Actuators | Ball Screws | Gearboxes | Lifts | Systems

### Ball Screws



### Multi-Axis Systems

### High Force Lifting Jacks & Guided Rack

### Ball Screw Assemblies And Linear Actuators



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AUTOMATION



## AUTOMATED APPLICATION Examples 2/3



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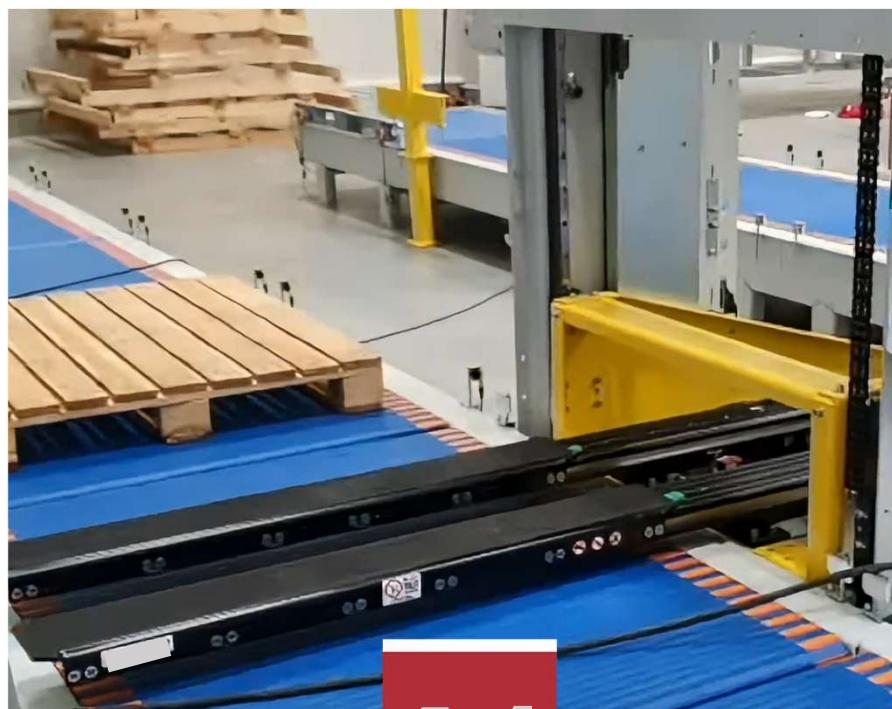


**fang TOOTH**  
AUTOMATED SWITCHFORKS

## AUTOMATED APPLICATION Examples 1/3



**X1**



**A1**



**A1**

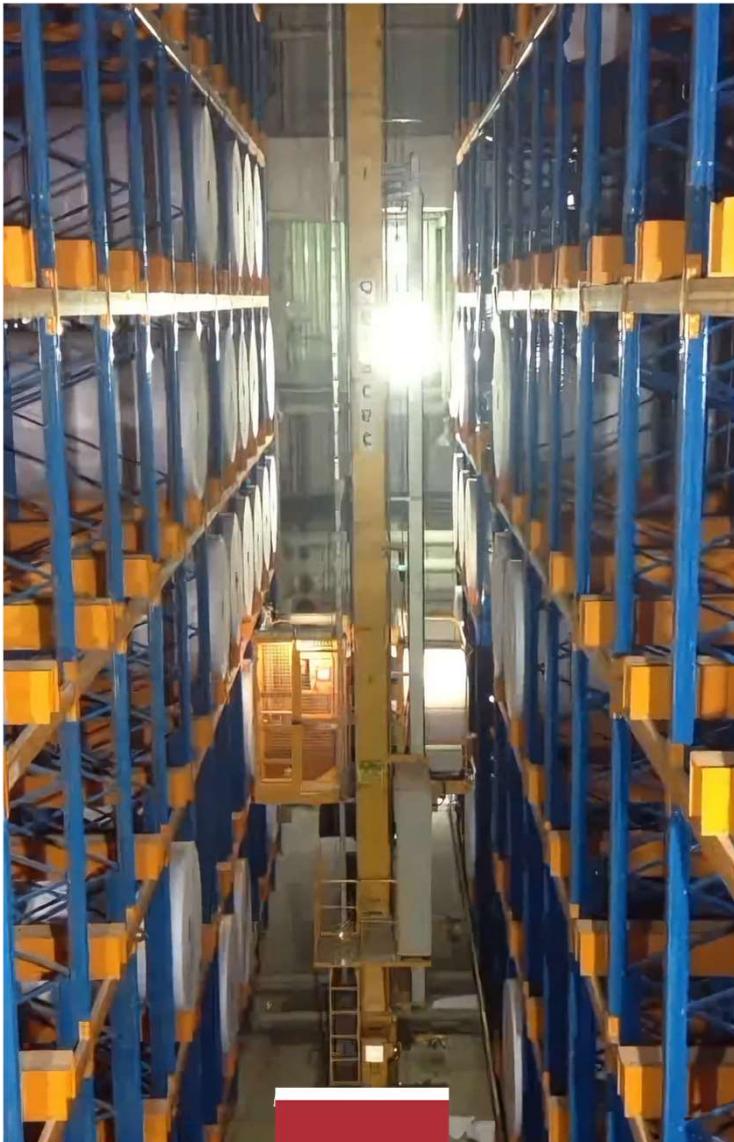
**Ph 248-798-4877**  
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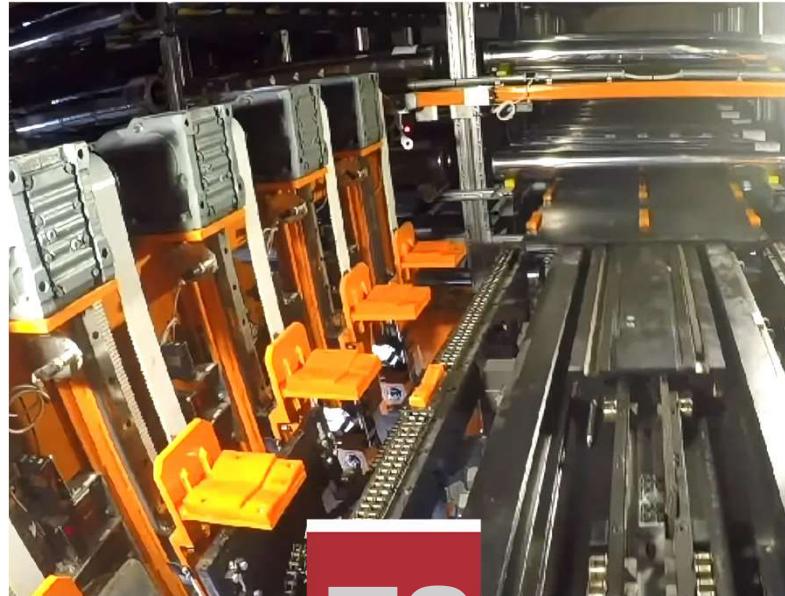


**fang TOOTH**  
AUTOMATED SWITCHFORKS

## AUTOMATED APPLICATION Examples 3/3



**T1**



**Z2**



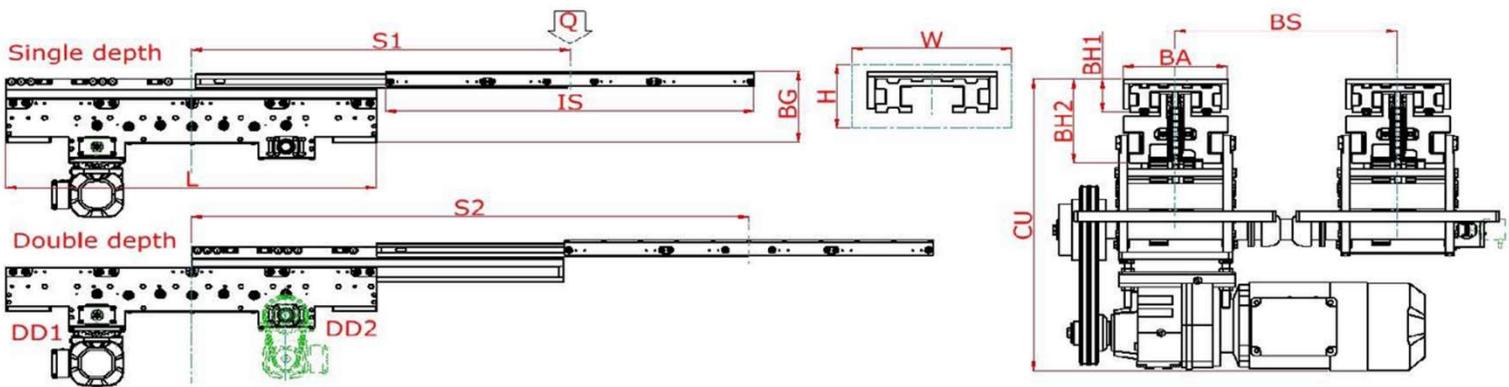
**KH**

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AUTOMATED SWITCHFORKS

## AUTOMATED SWITCHFORK Application Worksheet



ASF speeds vary widely (from <32 feet/minute to >170 feet/minute) depending on with higher speeds often trading off with force and can be adjusted via motor control (PWM).

Additionally, rating charts assume load is at "Q" position centered above. Rating charts shown are typical strokes, but upon application review – more stroke may be attained as single telescopic depths may get as much as 1.4 times the "L" dimension. Double telescopic depths may get as much as 2.1 times the "L" dimension. Triple telescopic depths may get as much as 2.7 times the "L" dimension.

Fixed body length of the base mounting structure (L):	Stroke(S1):
Upper deck length (IS) Usually the same as the (L) may request shorter or longer here:	Load dims (l x w x h):  Load:
Inter axis distance FORK WIDTH (BS):	Load Center of Gravity:
Power available:	Environment conditions:
Encoder protocol:	Temperature:

Additional Considerations:

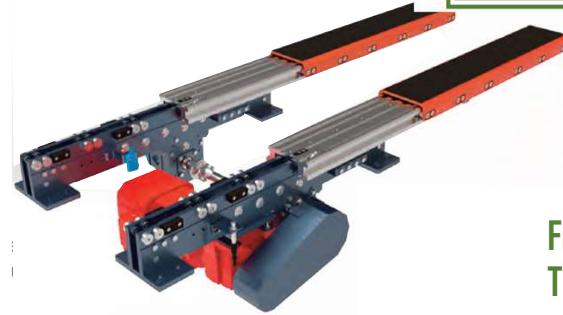
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## Cataloged Products



**A1**

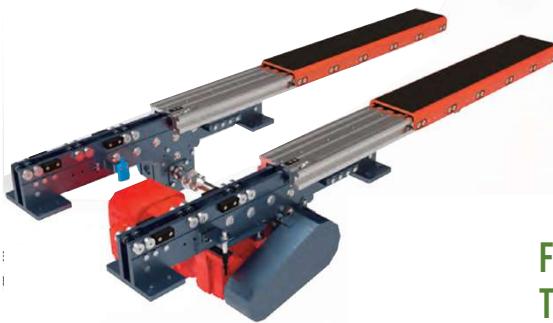
**FANGTOOTH SWITCHFORK**  
**ASF-A1 SERIES "A-II-TELE01"**  
**STANDARD LOAD**



Fork Set = II Forks  
Telescopic Depth = 1

**T1**

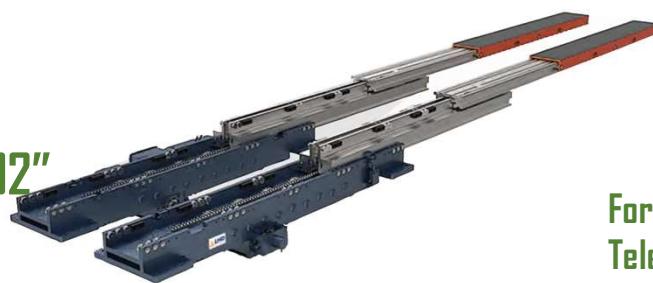
**FANGTOOTH SWITCHFORK**  
**ASF-T1 SERIES "T-II-TELE01"**  
**HEAVY LOAD**



Fork Set = II Forks  
Telescopic Depth = 1

**Z2**

**FANGTOOTH SWITCHFORK**  
**ASF-Z2 SERIES "Z-II-TELE02"**  
**STANDARD LOAD**



Fork Set = II Forks  
Telescopic Depth = 2

**R3**

**FANGTOOTH SWITCHFORK**  
**ASF-R3 SERIES "R-II-TELE03"**  
**STANDARD LOAD**



Fork Set = II Forks  
Telescopic Depth = 3

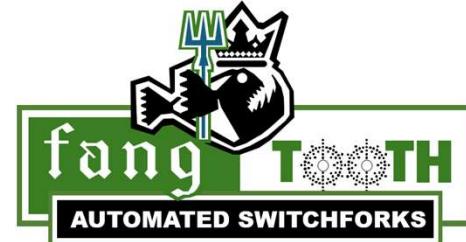
**X**

**FANGTOOTH SWITCHFORK**  
**ASF-X SERIES**  
**SCISSOR LIFT**



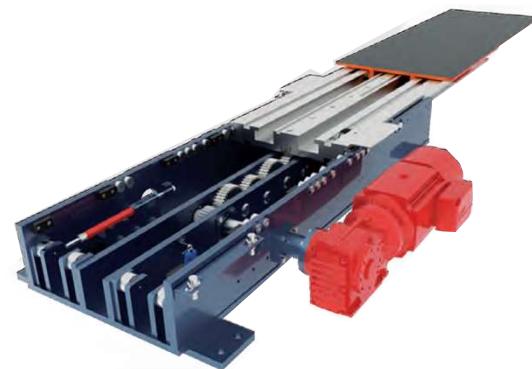
## Other Products

On Request



Ask About...

**FANGTOOTH SWITCHFORK**  
**ASF-A1K SERIES "AK-I-TELE01"**  
**WIDE BODY**



Fork Set = I Fork  
Telescopic Depth = 1

Ask About...

**FANGTOOTH SWITCHFORK**  
**ASF-A1SS SERIES "AS-II-TELE01"**  
**STAINLESS STEEL**



Fork Set = II Forks  
Telescopic Depth = 1

Ask About...

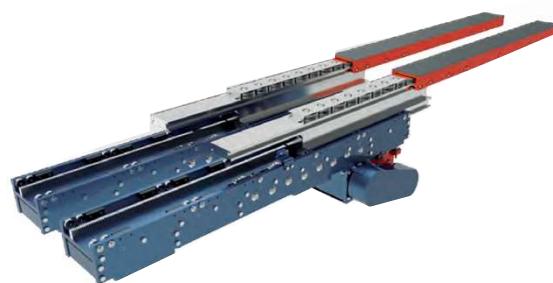
**FANGTOOTH SWITCHFORK**  
**ASF-P1 SERIES "P-I-TELE01"**  
**PUSH PULL MODE**



Fork Set = I Forks  
Telescopic Depth = 1

Ask About...

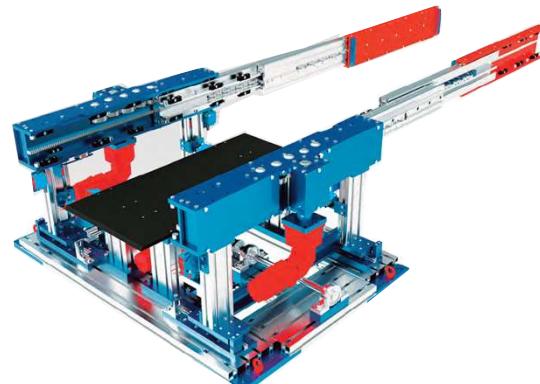
**FANGTOOTH SWITCHFORK**  
**ASF-H1 SERIES "H-II-TELE01"**  
**DIRTY ENVIRONMENTS**



Fork Set = II Forks  
Telescopic Depth = 1

Ask About...

**FANGTOOTH SWITCHFORK**  
**ASF-K SERIES**  
**CARTON LOADER**

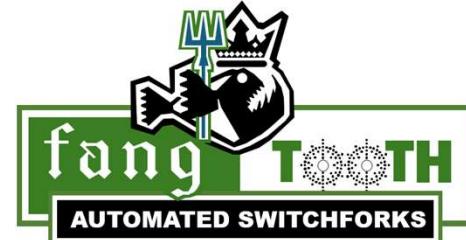


Fork Set = II Forks  
Telescopic Depth = 1

# FANGTOOTH SWITCHFORK

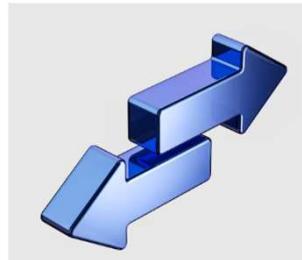
## ASF-A1 SERIES "A-II-TELE01"

### STANDARD LOAD

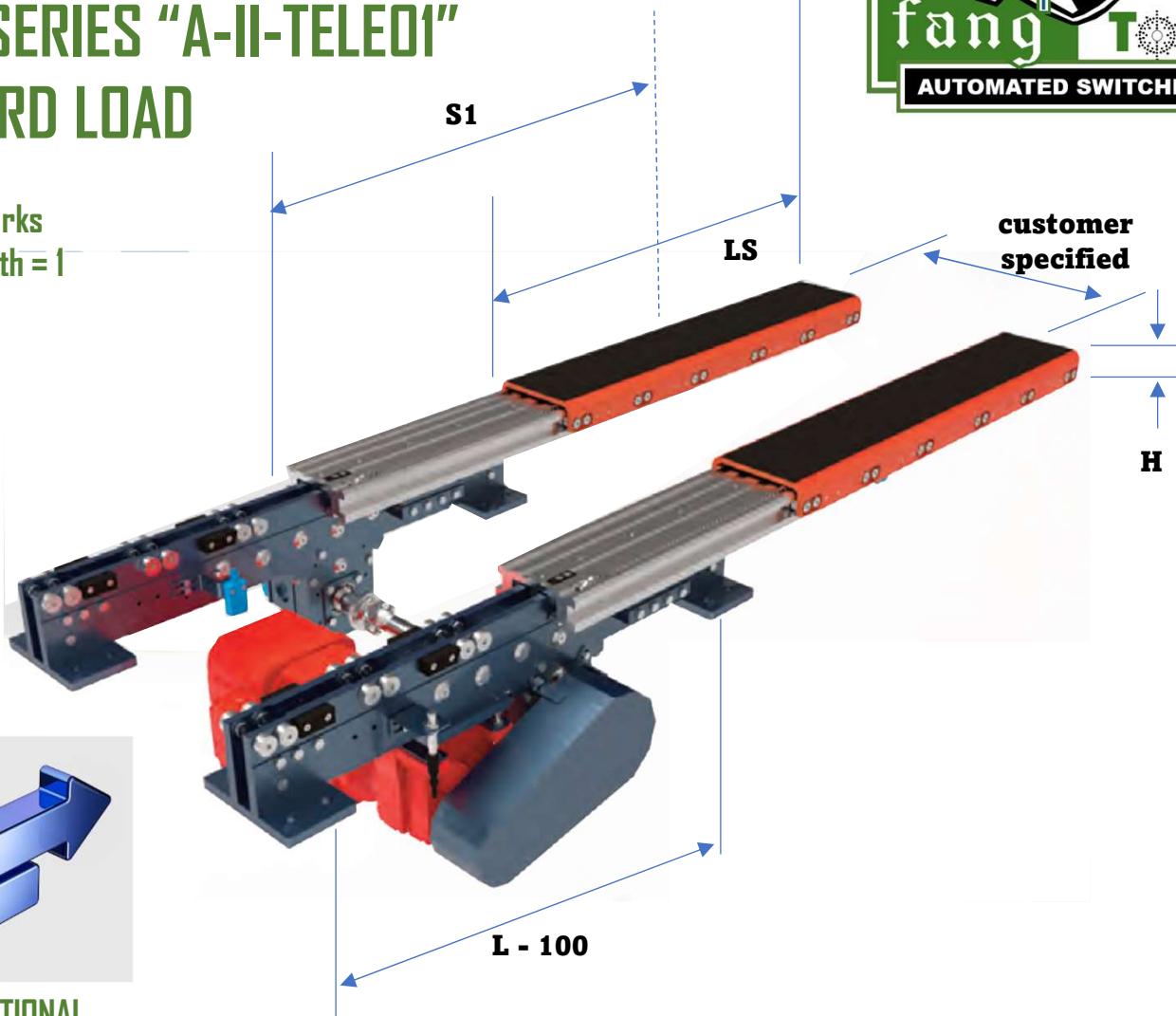


Fork Set = II Forks  
Telescopic Depth = 1

**A1**



BI-DIRECTIONAL

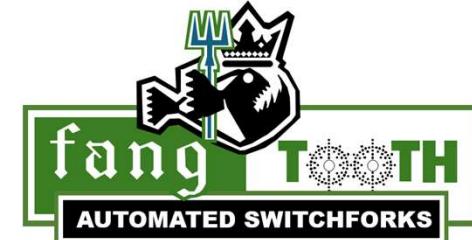


Size	H	Each Fork Width	S1 Stroke	Rated Load	L	LS	Max Bending
A0200	52 mm	220 mm	1100 mm	1000 KG	1000 mm	1000 mm	12 mm
A0200	52 mm	220 mm	1300 mm	1200 KG	1200 mm	1200 mm	23 mm
A0200	52 mm	220 mm	1400 mm	1200 KG	1300 mm	1250 mm	28 mm
A0200	52 mm	220 mm	1500 mm	1000 KG	1400 mm	1250 mm	28 mm
A0200	52 mm	220 mm	1600 mm	1000 KG	1500 mm	1250 mm	32 mm
A0200	52 mm	220 mm	1900 mm	600 KG	1800 mm	1600 mm	64 mm
A0800	70 mm	180 mm	1000 mm	1350 KG	900 mm	900 mm	9 mm
A0800	70 mm	180 mm	1100 mm	1350 KG	1000 mm	1000 mm	11 mm
A0800	70 mm	180 mm	1300 mm	1350 KG	1200 mm	1200 mm	18 mm
A0800	70 mm	180 mm	1450 mm	1350 KG	1350 mm	1240 mm	24 mm
A0800	70 mm	180 mm	1600 mm	1350 KG	1500 mm	1240 mm	29 mm
A0800	70 mm	180 mm	1800 mm	800 KG	1700 mm	1450 mm	25 mm
A0800	70 mm	180 mm	1900 mm	600 KG	1800 mm	1600 mm	23 mm
A0800-XTRA	100 mm	120 mm	1100 mm	800 KG	1000 mm	1000 mm	6 mm
A0800-XTRA	100 mm	120 mm	1250 mm	800 KG	1150 mm	1150 mm	7 mm
A0800-XTRA	100 mm	120 mm	1400 mm	800 KG	1300 mm	1300 mm	9 mm
A0800-XTRA	100 mm	120 mm	1550 mm	800 KG	1450 mm	1450 mm	11 mm
A0800-XTRA	100 mm	120 mm	1700 mm	800 KG	1600 mm	1600 mm	14 mm
A0800-XTRA	100 mm	120 mm	1850 mm	800 KG	1750 mm	1750 mm	17 mm
A0800-XTRA	100 mm	120 mm	2100 mm	800 KG	2000 mm	2000 mm	23 mm
A1500	80 mm	180 mm	1100 mm	1500 KG	1000 mm	1000 mm	8 mm
A1500	80 mm	180 mm	1300 mm	1500 KG	1200 mm	1200 mm	12 mm
A1500	80 mm	180 mm	1450 mm	1500 KG	1350 mm	1240 mm	16 mm
A1500	80 mm	180 mm	1600 mm	1500 KG	1500 mm	1240 mm	20 mm
A1500	80 mm	180 mm	1800 mm	1500 KG	1700 mm	1450 mm	27 mm
A1500	80 mm	180 mm	1950 mm	1500 KG	1850 mm	1500 mm	22 mm
A1500	80 mm	180 mm	2100 mm	1500 KG	2000 mm	1600 mm	27 mm

# FANGTOOTH SWITCHFORK

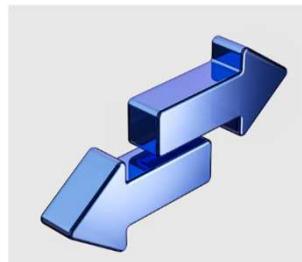
## ASF-T1 SERIES "T-II-TELE01"

### HEAVY LOAD

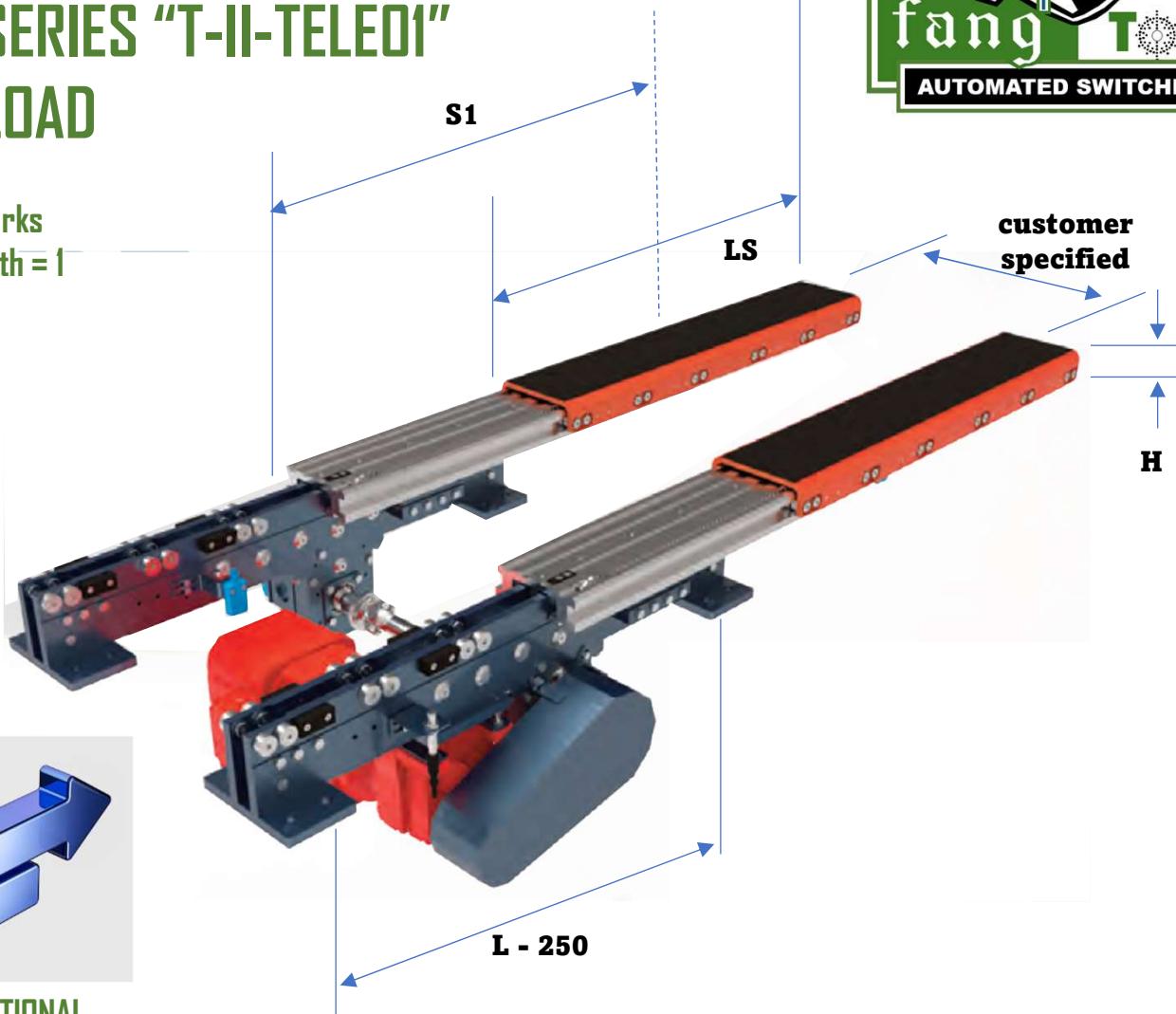


Fork Set = II Forks  
Telescopic Depth = 1

**T1**



BI-DIRECTIONAL

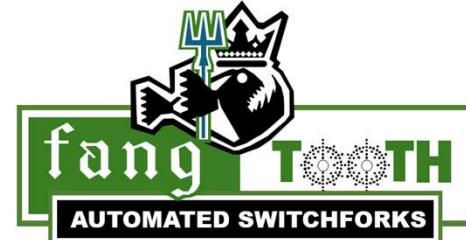


Size	H	Each Fork Width	S1 Stroke	Rated Load	L	LS	Max Bending
T2000	100 mm	200 mm	1000 mm	2000 KG	900 mm	900 mm	4 mm
T2000	100 mm	200 mm	1200 mm	2000 KG	1100 mm	1100 mm	6 mm
T2000	100 mm	200 mm	1400 mm	2000 KG	1300 mm	1300 mm	9 mm
T2000	100 mm	200 mm	1600 mm	2000 KG	1500 mm	1500 mm	13 mm
T2000	100 mm	200 mm	1800 mm	2000 KG	1700 mm	1700 mm	18 mm
T2000	100 mm	200 mm	2100 mm	2000 KG	2000 mm	2000 mm	28 mm
T2000	100 mm	200 mm	2300 mm	2000 KG	2200 mm	2200 mm	36 mm
T2500	110 mm	200 mm	1200 mm	2500 KG	1100 mm	1100 mm	5 mm
T2500	110 mm	200 mm	1400 mm	2500 KG	1300 mm	1300 mm	8 mm
T2500	110 mm	200 mm	1600 mm	2500 KG	1500 mm	1500 mm	11 mm
T2500	110 mm	200 mm	1900 mm	2500 KG	1800 mm	1800 mm	18 mm
T2500	110 mm	200 mm	2100 mm	2500 KG	2000 mm	2000 mm	24 mm
T2500	110 mm	200 mm	2300 mm	2500 KG	2200 mm	2200 mm	30 mm
T2500	110 mm	200 mm	2600 mm	2000 KG	2500 mm	2500 mm	35 mm
T2500-XTRA	130 mm	200 mm	1600 mm	2500 KG	1500 mm	1500 mm	8 mm
T2500-XTRA	130 mm	200 mm	1700 mm	2500 KG	1600 mm	1600 mm	10 mm
T2500-XTRA	130 mm	200 mm	1800 mm	2500 KG	1700 mm	1700 mm	11 mm
T2500-XTRA	130 mm	200 mm	1900 mm	2500 KG	1800 mm	1800 mm	13 mm
T2500-XTRA	130 mm	200 mm	2000 mm	2500 KG	1900 mm	1900 mm	15 mm
T2500-XTRA	130 mm	200 mm	2100 mm	2500 KG	2000 mm	2000 mm	17 mm
T2500-XTRA	130 mm	200 mm	2300 mm	2500 KG	2200 mm	2200 mm	22 mm
T4000	220 mm	370 mm	1400 mm	4000 KG	1300 mm	1300 mm	2 mm
T4000	220 mm	370 mm	1600 mm	4000 KG	1500 mm	1500 mm	3 mm
T4000	220 mm	370 mm	1800 mm	4000 KG	1700 mm	1700 mm	3 mm
T4000	220 mm	370 mm	2000 mm	4000 KG	1900 mm	1900 mm	3 mm
T4000	220 mm	370 mm	2300 mm	4000 KG	2200 mm	2200 mm	4 mm
T4000	220 mm	370 mm	3000 mm	4000 KG	2900 mm	2900 mm	8 mm

# FANGTOOTH SWITCHFORK

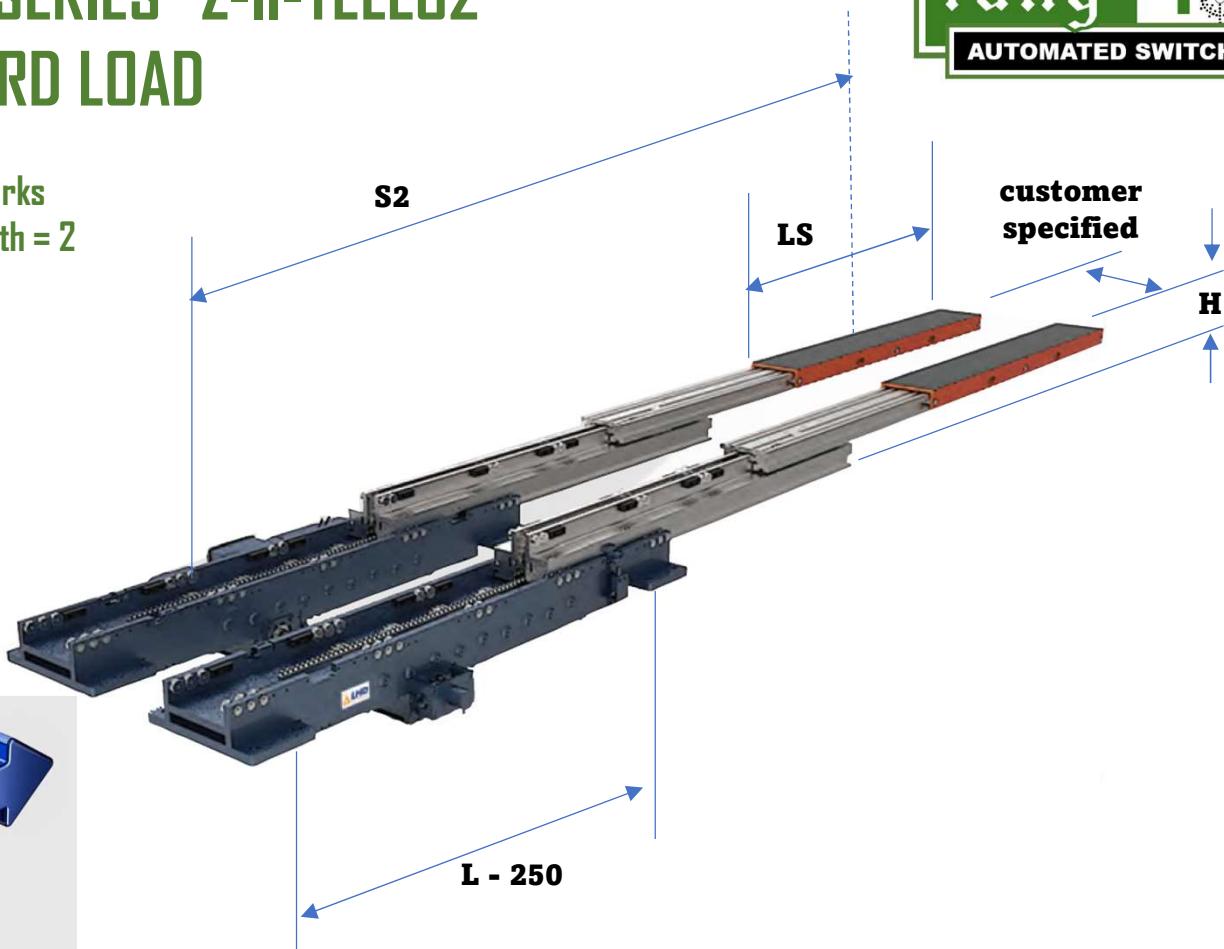
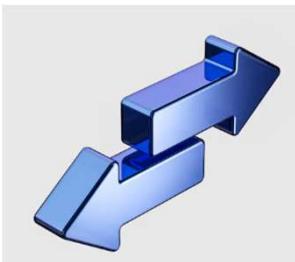
## ASF-Z2 SERIES "Z-II-TELE02"

### STANDARD LOAD



Fork Set = 2 Forks  
Telescopic Depth = 2

**Z2**



**BI-DIRECTIONAL**

	H	Each Fork Width	S2 Stroke	Rated Load	L	LS	Max Bending
Z0500	140 mm	175 mm	2000 mm	500 KG	1100 mm	1100 mm	12 mm
Z0500	140 mm	175 mm	2500 mm	500 KG	1250 mm	1250 mm	25 mm
Z0500	140 mm	175 mm	2650 mm	500 KG	1300 mm	1250 mm	31 mm
Z0500	140 mm	175 mm	2750 mm	500 KG	1350 mm	1250 mm	34 mm
Z0500	140 mm	175 mm	28250mm	500 KG	1400 mm	1250 mm	38 mm
Z0500	140 mm	175 mm	2950 mm	500 KG	1450 mm	1250 mm	42 mm
Z0500	140 mm	175 mm	3000 mm	500 KG	1500 mm	1250 mm	43 mm
Z1000	165 mm	172 mm	1900 mm	1200 KG	1000 mm	1000 mm	21 mm
Z1000	165 mm	172 mm	2300 mm	1200 KG	1250 mm	1000 mm	32 mm
Z1000	165 mm	172 mm	2600 mm	1000 KG	1300 mm	1250 mm	46 mm
Z1000	165 mm	172 mm	2700 mm	1000 KG	1350 mm	1250 mm	51 mm
Z1000	165 mm	172 mm	2800 mm	1000 KG	1400 mm	1250 mm	56 mm
Z1000	165 mm	172 mm	2900 mm	800 KG	1450 mm	1250 mm	50 mm
Z1000	165 mm	172 mm	3000 mm	800 KG	1500 mm	1250 mm	55 mm
Z1000-FAST	165 mm	172 mm	1050 S1 / 2050 S2	1000 KG	1000 mm	1000 mm	26 mm
Z1000-FAST	165 mm	172 mm	1325 S1 / 2625 S2	1100 KG	1250 mm	1250 mm	58 mm
Z1000-FAST	165 mm	172 mm	1350 S1 / 2650 S2	1100 KG	1300 mm	1250 mm	56 mm
Z1000-FAST	165 mm	172 mm	1375 S1 / 2675 S2	1200 KG	1350 mm	1250 mm	57 mm
Z1000-FAST	165 mm	172 mm	1400 S1 / 2700 S2	1100 KG	1400 mm	1250 mm	55 mm
Z1000-FAST	165 mm	172 mm	1600 S1 / 3000 S2	800 KG	1500 mm	1250 mm	55 mm
Z1800	200 mm	200 mm	2650 mm	1400 KG	1300 mm	1250 mm	24 mm
Z1800	200 mm	200 mm	2675 mm	1600 KG	1350 mm	1250 mm	26 mm
Z1800	200 mm	200 mm	2700 mm	1800 KG	1400 mm	1250 mm	28 mm
Z1800	200 mm	200 mm	2725 mm	2000 KG	1450 mm	1250 mm	28 mm
Z1800	200 mm	200 mm	2750 mm	2000 KG	1500 mm	1250 mm	29 mm
Z1800	200 mm	200 mm	3150 mm	1600 KG	1600 mm	1250 mm	36 mm
Z1800	200 mm	200 mm	3300 mm	1600 KG	1800 mm	1350 mm	39 mm

# FANGTOOTH SWITCHFORK

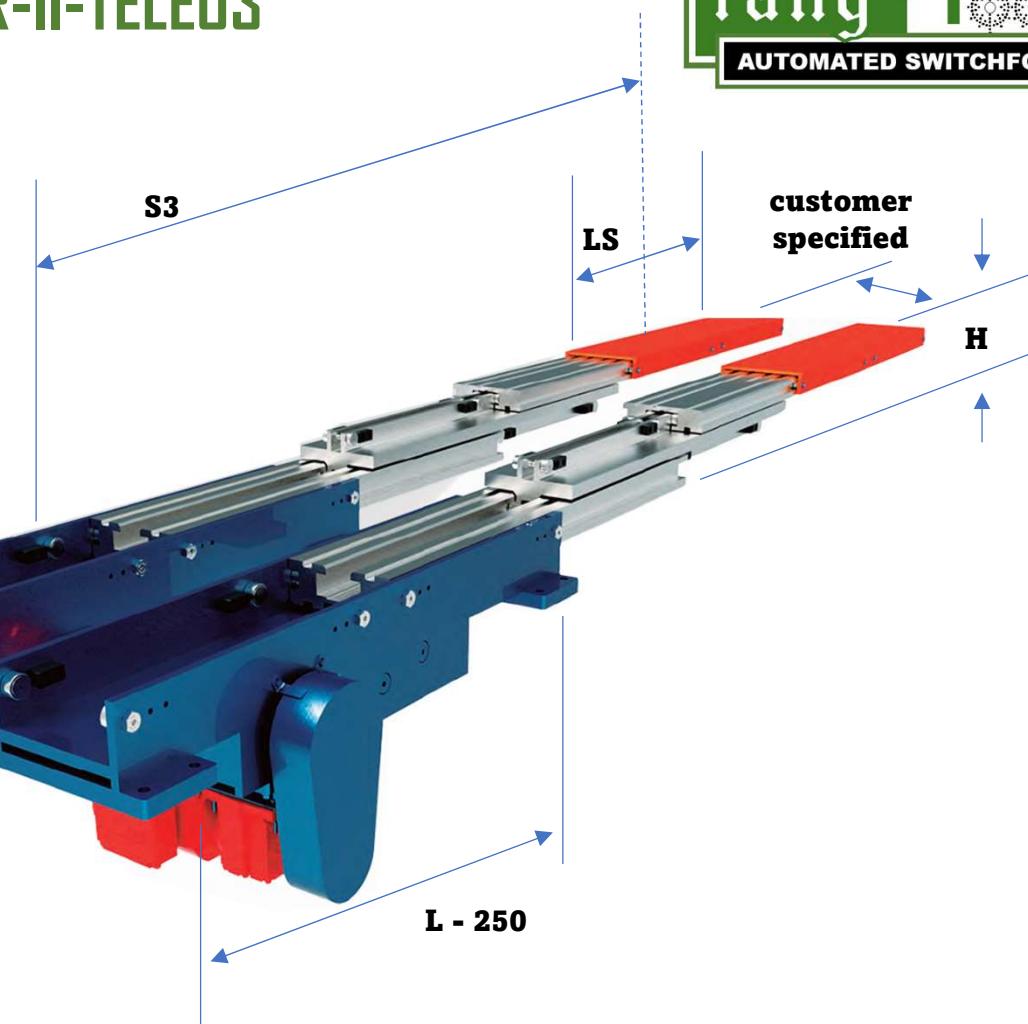
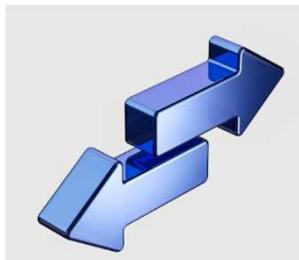
## ASF-R3 SERIES "R-II-TELE03"

### STANDARD LOAD



Fork Set = II Forks  
Telescopic Depth = 3

**R3**



**BI-DIRECTIONAL**

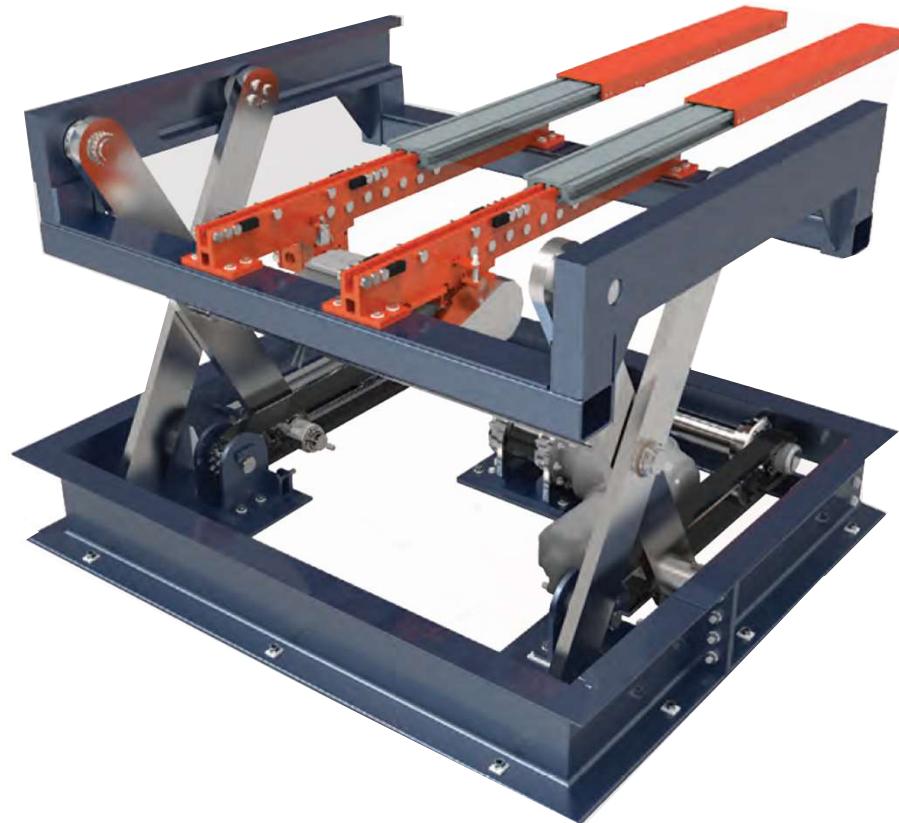
	H	Each Fork Width	S3 Stroke	Rated Load	L	LS	Max Bending
R0300	154 mm	250 mm	1800 mm	300 KG	800 mm	800 mm	8 mm
R0300	154 mm	250 mm	2500 mm	300 KG	1000 mm	1000 mm	27 mm
R0300	154 mm	250 mm	3000 mm	300 KG	1200 mm	1200 mm	47 mm
R0300	154 mm	250 mm	3400 mm	150 KG	1300 mm	1300 mm	43 mm
R1000	185 mm	240 mm	3000 mm	1000 KG	1300 mm	1300 mm	23 mm
R1000	185 mm	240 mm	3200 mm	1000 KG	1350 mm	1350 mm	29 mm
R1000	185 mm	240 mm	3500 mm	1000 KG	1450 mm	1450 mm	39 mm
R1000	185 mm	240 mm	3700 mm	1000 KG	1600 mm	1600 mm	41 mm
R1200	248 mm	180 mm	3000 mm	1200 KG	1300 mm	1300 mm	32 mm
R1200	248 mm	180 mm	3100 mm	1200 KG	1350 mm	1350 mm	34 mm
R1200	248 mm	180 mm	3200 mm	1000 KG	1400 mm	1400 mm	32 mm
R1200	248 mm	180 mm	3300 mm	1000 KG	1450 mm	1450 mm	35 mm
R1200	248 mm	180 mm	3500 mm	800 KG	1500 mm	1500 mm	36 mm
R1200	248 mm	180 mm	3700 mm	800 KG	1600 mm	1600 mm	40 mm
R1200-FAST	248 mm	180 mm	1600 S2 / 3000 S3	1200 KG	1300 mm	1300 mm	40 mm
R1200-FAST	248 mm	180 mm	1850 S2 / 3250 S3	1200 KG	1400 mm	1300 mm	51 mm
R1200-FAST	248 mm	180 mm	2100 S2 / 3500 S3	1200 KG	1500 mm	1300 mm	61 mm
R1200-FAST	248 mm	180 mm	2350 S2 / 3750 S3	1000 KG	1600 mm	1300 mm	62 mm

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# FANGTOOTH SWITCHFORK ASF-X SERIES SCISSOR LIFT



X



	Min Load Ht	Single Stroke Time	Max Lift Stroke	Rated Load
X2000	380 mm	8 s	600 mm	2000 KG
X1500	500 mm	12 s	1000 mm	1500 KG

Ph 248-798-4877  
sales@fang2th.com  
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## SECTION 1: APPLICABILITY

- 1.1 These terms & conditions (the "Terms and Conditions") of sale are applicable to all quotations for the sale or orders for the purchase of all equipment or goods (the "Products") made by or for Fangtooth Inc 11970 Mayfield St. Livonia MI 48150 ("Company").
- 1.2 Unless otherwise agreed, written quotations are valid for 30 days from the date of quotation. All price lists and discounts are subject to change without notice.
- 1.3 All orders placed by the Buyer are subject to written acceptance by the Company. No contract between Buyer and Company shall exist prior to the time of such acceptance by the Company.
- 1.4 These Terms & Conditions supersede all prior written terms, understandings, purchase orders, assurances and offers. Company shall not be deemed to have waived these Terms & Conditions if it fails to object to the conditions appearing in or attached to a purchase order issued by Buyer. Buyer's acceptance of the Products or services furnished by the Company shall constitute its acceptance of these Terms & Conditions.

## SECTION 2: PRICE & SHIPPING DATES

- 2.1 All orders must be bona fide commitments showing a complete description of equipment, quantity, price & shipping dates required by the Buyer.
- 2.2 Timely performance by Company is contingent upon Buyer supplying to Company, when applicable, all required technical information and data, including drawing approvals, and all required commercial documentation. Shipping dates are subject to final confirmation or change by Company and are based on prompt receipt of all necessary information regarding the order. Unless otherwise indicated, all delivery dates specified by the Company are estimated time frames and time is not of the essence in Company's performance of the sale of the Products.
- 2.3 If shipment is delayed for thirty (30) days or more from the delivery date accepted by the Company for reasons attributable to the Buyer and provided that the Buyer shall have no other liability to the Company in respect of such delay, the reasonable direct costs of putting the Products into storage at a facility off-site of Company's premises until such times as they are shipped (or delivered) shall be the to the Buyer's account and at Buyer's sole risk.

## SECTION 3: PAYMENT

Terms of payment are net 30 days from the date of invoice unless otherwise agreed in writing. Late payments may be subject to interest on the unpaid balance at the greater of 2% per month or the maximum rate permitted by law. No deductions or set-offs are to be made by Buyer from amounts due unless specifically authorized by the Company in writing. If in the judgment of the Company, the financial condition of Buyer at any time does not justify continuance of production or shipment on the terms of payment specified, the Company may require full or partial payment in advance.

## SECTION 4: TAXES

The Company's prices do not include sales, use, excise taxes, tariffs, duties or value added or similar taxes or fees. The Company will add such taxes or fees to the invoice unless the Buyer provides Company with tax-exempt certificate acceptable to the applicable taxing authorities or arranges payment of such taxes or fees directly by the Buyer.

## SECTION 5: WARRANTY

- 5.1 NEW PRODUCT – Company warrants the Products shall be free of defects in material and workmanship and meet the Product specifications for a period from the date of shipment as specified below.
  - 5.1.a FANGTOOTH MAX straddle mounted pinion systems – 3 years.
  - 5.1.b FANGTOOTH OPEN cantilevered pinion systems – 2 years.
  - 5.1.c FANGTOOTH Any products not specified as standard including any units with non-standard coatings for corrosion claims – 1 year.
  - 5.1.d FANGBOT integrated systems – FANGTOOTH MAX integrated into larger systems will carry the full 3 year warranty. FANGTOOTH OPEN integrated into larger systems will carry the full 2 year warranty. Custom (non-standard) engineered products within the larger systems or any other non-standard FANGTOOTH products will be warranties for 18 months.
- 5.2 Notwithstanding the warranty periods listed above, the warranty on normal wear items such as oil seals is limited to one year. The warranties of gearboxes, motors, brakes, couplings, linear rail, linear bearings, gear rack and pinion and all other add on items shall be the warranties provided by, and shall be the responsibility of, the original equipment manufacturer. The Company is not responsible for and does not warrant (a) equipment, components and/or material furnished by the Buyer; (b) the sufficiency of functionality of any design specifications furnished by the Buyer; nor shall Company be liable for defects or damages arising from the foregoing. Notwithstanding any other provision in these Terms and Conditions, none of the warranties given by the Company shall apply to products manufactured by others and sold by the Company. Buyer will at its own expense arrange for any dismantling and reassembly of any goods and equipment and the provision of all equipment (including without limitation lifting equipment and crane-age) to the extent that this is necessary to remedy the defect or facilitate re-performance of service.

Unless otherwise agreed, necessary transport of the Products and/or parts therefo to and from Company in connection with the remedying of defects will be at the risk and expense of the Buyer. Buyer will follow Company's instructions regarding such transport.

Unless otherwise agreed, Buyer will bear any additional costs which Company incurs as a result of the Products being located in a place other than the place of delivery.

Defective parts which have been replaced will be made available to Company and will be its property.

5.3 Any claims under this warranty must be made in writing to the Company at the address set forth above (or by email) within thirty (30) days of the discovery thereof. The

Company's obligation under this warranty shall be limited to the repair or replacement, at the Company's option, of the Product, or any part thereof, when the Company has determined the Product is not warranted; any Product or parts repaired or replaced pursuant to the warranty will be warranted for the remainder of the original warranty period. The Company shall not be responsible for any claims which the Company determines are due to improper installation, operation above rated capacity, exceeds L10 life cycles, operation at extreme conditions, normal wear and tear, accident, or because the Product has been used, adjusted, altered, handled, maintained, repaired or stored other than as directed by the Company.

5.4 This warranty shall not apply in the event of defects caused by: (i) physical abuse of the Products or any component, or acts of vandalism by any persons other than Company; (ii) alterations, modifications, additions, or repairs made during the applicable warranty period by anyone other than Company, and its authorized employees, agents or subcontractors; (iii) accidents or damage resulting from fire, water, wind, hail, lightning, electrical surge or failure, earthquake, theft or similar causes not caused by the sole negligence of Company; (iv) damage as a result of corrosion or other damage caused by Buyer's failure to protect and maintain the Products in accordance with Company's written instructions and warnings; or (v) design specifications furnished by Buyer.

5.5 Buyer shall not rely upon Company's skill or judgement or furnish Products for any particular purpose beyond the specific express warranties provided herein. Buyer has the responsibility to determine whether the Products and specifications are fit for buyer's intended purpose. Company does not warrant the Products will comply with the requirements or any safety code or regulations, or with any environmental or other law or regulation. Buyer is responsible for the safe and lawful operation and use of the Products.

5.9 THE FOREGOING WARRANTIES ARE THE SOLE WARRANTIES PROVIDED BY COMPANY FOR THE PRODUCTS AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ALL OF WHICH ARE HEREBY DISCLAIMED AND EXCLUDED BY MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. BUYER AGREES THAT ITS SOLE AND EXCLUSIVE REMEDY AGAINST COMPANY WILL BE LIMITED TO THE REPAIR AND REPLACEMENT OF NONCONFORMING OR DEFECTIVE PRODUCTS PROVIDED COMPANY IS PROMPTLY NOTIFIED IN WRITING OF ANY DEFECT. THIS EXCLUSIVE REMEDY WILL NOT BE DEEMED TO HAVE FAILED IF ITS ESSENTIAL PURPOSE SO LONG AS COMPANY IS WILLING TO REPAIR OR REPLACE THE NONCONFORMING OR DEFECTIVE PRODUCTS.

## SECTION 6: OWNERSHIP OF INTELLECTUAL PROPERTY

Company retains ownership and all rights to its intellectual property. Buyer shall have no rights to Company's intellectual property. Any intellectual property developed by Company and arising in connection with the supply of Products hereunder shall be deemed property of Company, and Company shall have exclusive rights to the use and ownership of such intellectual property.

## SECTION 7: THIRD PARTY INTELLECTUAL PROPERTY CLAIMS

Company shall pay costs and damages finally awarded in any suit against Buyer by a third party to the extent based upon a finding that the design or construction of the Products as furnished infringes a patent or other third party intellectual property rights (except infringement occurring as a result of incorporating a design or modification at Buyer's request), provided that Buyer promptly notifies Company of any charge of infringement, and Company is given the right at its expense to settle such charge and to defend or control the defense of any suit based upon such charge. Company shall have no obligation hereunder with respect to claims, suits or proceedings, resulting from or related to, in whole or in part, (i) the use of software or software documentation, (ii) compliance with Buyer's specifications, (iii) the combination with other products, or modification of, the Products after delivery by Company, or (iv) the use of the Products, or any part thereof, in the practice of a process. THIS SECTION SETS FORTH COMPANY'S ENTIRE LIABILITY WITH RESPECT TO PATENTS OR OTHER INFRINGEMENTS OF INTELLECTUAL PROPERTY.

## SECTION 8: RETURN OF PRODUCTS

In the event that the Buyer does not accept the Products, the Buyer must apply for authorization from the Company before returning the Products to the Company for credit. The Company will advise the Buyer of the credit to be allowed and necessary restocking charges on the unused material, subject to the Company's inspection and acceptance when received. No material should be returned to the Company except upon receipt of written authorization. In addition to the usual restocking charges, the Buyer must pay the actual transportation expense of the Company, plus all return transportation costs. Motors and specially designed parts will not be accepted for return or credit.

## SECTION 9: DELIVERY, TITLE AND RISK OF LOSS

The Products will be delivered Ex Works – Fangtooth Inc's facility (in accordance with Incoterms 2010) unless otherwise agreed in writing by Company. The Buyer will be responsible for making all shipping arrangements, and Buyer will provide sufficient notice and details of such arrangements to allow Company to prepare the Products for delivery. Title and risk of loss will remain with Company and not pass to Buyer until delivery to the Incoterm delivery point.

## SECTION 10: FORCE MAJEURE

Company will not be deemed to be in default or otherwise responsible for delays or failures in performance resulting from acts of God: acts or war, or civil disturbance, terrorism, epidemics, governmental action or inaction, fires, floods, earthquakes, tornadoes, or other events beyond Company's reasonable control (a "Force majeure Event"). A Force Majeure Event affecting Company's vendors shall also be deemed as a Force Majeure Event for the Company, provided that the Company shall use commercially reasonable efforts to mitigate any delays caused by its vendor's Force Majeure situation. Company shall in such instances give notice of the non-performance (including its anticipated duration) to the Customer promptly after becoming aware that it has occurred or will occur. In no event shall lack of finances or ability to pay as a result of the financial condition of either party be considered a Force Majeure Event.

**SECTION 11: CANCELLATION**

Upon written acceptance of an order by the Company, Buyer may not cancel or terminate for convenience, or direct suspension of manufacture, except with Company's written consent and then only upon terms that will compensate Company for its engineering, fabrication and purchasing charges and any other costs relating to such cancellation, termination, or suspension, plus a reasonable amount for profit and overhead.

**SECTION 12: ETHICAL BUSINESS PRACTICES**

Company requires manufacturing and business practices that are compliant with all applicable laws and regulations, including, the need to conduct all transactions in compliance with ethical business practices. Both the Company and the Buyer agree that neither of them nor their employees, agents, representatives, or other intermediaries will engage in any activity that may be construed to be in violation of their respective codes of ethical business practices or applicable law. Buyer acknowledges and agrees that it shall not, in regards to the sale or resale of the Company's products, make any payment or transfer of value to any third party (including through any or multiple intermediaries) that would cause either the Buyer, Company or any of Company's affiliates to violate either the U.S. Foreign Corrupt Practices Act or any other applicable anti-corruption laws. Buyer shall indemnify and hold Company and Company's affiliates harmless in the even of any breach of this paragraph by buyer or any of its intermediaries.

**SECTION 13: LIMITATION OF LIABILITY**

NEITHER COMPANY AND ITS AFFILIATES AND THEIR RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, INSURERS AND ATTORNEYS SHALL BE LIABLE, WHETHER IN CONTRACT, WARRANTY, FAILURE OF A REMEDY TO ACHIEVE ITS INTENDED OR ESSENTIAL PURPOSES, TORT (INCLUDING LOSS OF USE, REVENUE OR PROFIT, OR FOR COSTS OF CAPITAL OR OF SUBSTITUTE USE OR PERFORMANCE, OR FOR INDIRECT, SPECIAL, LIQUIDATED, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR FOR ANY OTHER LOSS OR COST OF SIMILAR TYPE, OR FOR OTHER CLAIMS BY BUYER FOR ANY DAMAGES OR LOSSES. COMPANY'S MAXIMUM LIABILITY FOR ALL CLAIMS AND LOSSES ARISING OUT OF THE MANUFACTURE OR SALE OF THE PRODUCTS SHALL BE THE PRICE CONFIRMED BY THE COMPANY RELATING TO THE INDIVIDUAL SALE TRANSACTION WITH THE BUYER. BUYER AND COMPANY AGREE THAT THE EXCLUSIONS AND LIMITATIONS SET FORTH IN THIS SECTION ARE SEPARATE AND INDEPENDENT FROM ANY REMEDIES WHICH BUYER MAY HAVE HEREUNDER AND SHALL BE GIVEN FULL FORCE AND EFFECT WHETHER OR NOT ANY OR ALL SUCH REMEDIES SHALL BE DEEMED TO HAVE FAILED OF THEIR ESSENTIAL PURPOSE.

**SECTION 14: GOVERNING LAW**

The terms of the sales of the Products shall be governed and controlled in all respects by the laws of the State of Michigan and all disputes, including interpretation, enforceability, validity, and construction, shall be determined under the law of the State of Michigan without regard to any conflict of law provisions. Any dispute arising between the parties will be finally resolved in the state or federal courts of Michigan. Each party consents to personal jurisdiction in the state and federal courts of the State of Michigan for any all matters related to or arising out of the sale, attempted sale, delivery, warranty, maintenance or use of the Products, and agrees that personal jurisdiction in any such court will be deemed proper. Buyer shall be liable to Company for any attorney fees and costs incurred by Company in enforcing any of its rights hereunder.

**SECTION 15: STATUTE OF LIMITATIONS**

To the extent permitted by applicable law, any lawsuit for breach of contract, including breach of warranty, arising out of the transactions covered by this Purchase Order, must be commenced not later than twelve (12) months from the date the cause of action accrued.

**SECTION 16: CHANGES IN LAWS AND REGULATIONS**

Company's prices and timely performance are based on all applicable laws, rules, regulations, orders, codes, standards or requirements of governmental authorities effective on the date of Company's proposal. Any applicable change to the forgoing shall entitle Company to an equitable adjustment in the prices and time of performance.

**SECTION 17: COMPLIANCE WITH EXPORT LAWS AND REGULATIONS**

Certain Products manufactured by Company, as well as technical data related thereto, may be subject to export licensing controls under the U.S. Export Administration Regulations and/or the U.S. International Traffic in Arms Regulations, which require licensing for and/or prohibit the export or diversion of the Company's products to certain countries. If Buyer is responsible for obtaining export approvals. Buyer warrants that it will not assist or participate in any export of the Company's products or related technical data without first obtaining the required export license and will not knowingly assist or participate in any such diversion or other violation of applicable U.S. laws and regulations. If Company is responsible for obtaining export approvals, Buyer shall assist the Company, as necessary, in obtaining such approvals. Buyer shall indemnify and hold the Company and its affiliates harmless from any losses or claims arising out of or related to Buyer's failure to comply with applicable export control laws and regulations.

**SECTION 18: COMPLIANCE WITH LAWS**

Buyer agrees to comply with all applicable local, state, Federal and Foreign laws, orders, directives, and regulations at any time in effect, including, but not limited to, those found in 41 CFR 60 requiring equal opportunity and affirmative action without regard to race, color, religion, sex, national origin, presence of disability or status as a special disabled veteran or Vietnam era veteran, which specifically incorporated herein by reference. If Buyer fails to comply with the provisions of this paragraph, Company may, by written notice to Buyer, terminate any Order for Buyer's default in addition to exercising any other rights or remedies provided by law.

**SECTION 19: RELATIONSHIP OF THE PARTIES**

Buyer and Company are independent contractors, and nothing in the contract makes either party the agent or legal representative of the other party for any purpose. Neither party has authority to assume or to create any obligation on behalf of the other party.

**SECTION 20: WAIVER**

The failure of Company to enforce any right or remedy provided in contract or by law on a particular occasion will not be deemed a waiver of that right or remedy on a subsequent occasion or a waiver of any other right or remedy.

**SECTION 21: SEVERABILITY**

A finding that any provision in these Terms & Conditions or an accepted purchase order is invalid or unenforceable in any jurisdiction will not affect the validity or enforceability of any other provision of these Terms & Conditions or an accepted purchase order or the validity or enforceability of that provision in any other jurisdiction.

**SECTION 22: ASSIGNMENT and DELEGATION**

No right or interest in the sale of Products hereunder shall be assigned by the Buyer without written permission of the Company. No delegation of any obligation owed, or the performance of any obligation by the Buyer, shall be made without the written permission of the Company. Any attempted assignment of delegation shall be wholly void and totally ineffective for all purposes unless made in conformity with this section. Company shall have the right to assign its obligations to any affiliate of the Company or any successor to substantially all the business or assets of the Company.

**SECTION 23: THIRD PARTY RIGHTS**

Notwithstanding any provision of law, no third party (including Buyer's customer) shall have the right to enforce these Terms & Conditions or any other contractual rights against Company or its affiliates.

**SECTION 24: HEADINGS**

The headings of the various paragraphs of these Terms & Conditions have been inserted for convenient reference only and shall not to any extent have the effect of modifying, amending, or changing the expressed terms and provisions hereof.

**SECTION 25: ENTIRE AGREEMENT**

These Terms & Conditions, including any attachments hereto, constitutes the entire understanding and agreement between the parties and supersedes any prior oral or written agreements with respect to the subject matter hereof. No course of prior dealings between the and the Buyer, and no usage of the trade shall be relevant to supplement or explain and term used herein. Acceptance or acquiescence in a course of performance rendered hereunder shall not be relevant to determine the meaning of these Terms & Conditions even though the accepting or acquiescing party has knowledge of the performance and opportunity for objection. Whenever a term defined by the Uniform Commercial Code is used herein, the definition contained in the Uniform Commercial Code shall control



## Planetary Lift

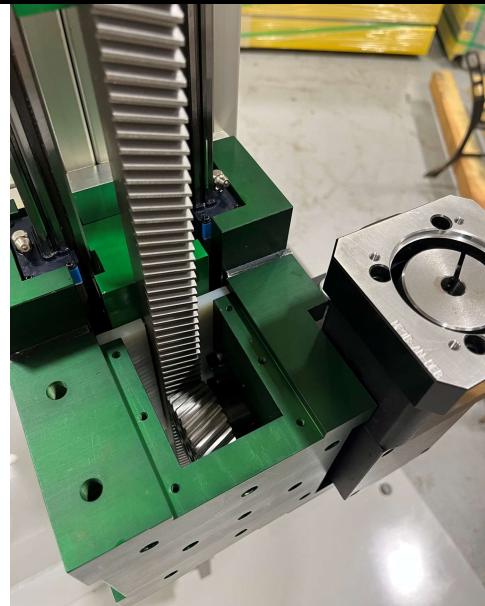
## Ball Screw Lift



**NEPTUNE**  
**TRITON**

## Standard Rack Axis

## Heavy Rack Axis



**fangOPEN**  
**fangMAX**



**Fangtooth Inc.**  
11790 Mayfield St  
Livonia, MI 48150  
Ph 248-798-4877

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