Stärke XVI Series new electric counterbalanced forklifts bring bold improvement to the market with significant reductions in total operating costs, while improving truck performance, efficiency and productivity. Starke XVI series four-wheel and three-wheel electric forklifts feature new and innovative design and engineering ideas that show Starke's commitment to fulfilling customer needs, conserving our environment, and reducing costs of ownership.



Our family of products provides a solution for every material handling situation. From manual and electric pallet trucks, stackers, reach trucks, order pickers, dock stockers, three and four wheel electric forklifts, and up to 22,000 lb internal combustion engine forklifts - every piece of equipment we sell is backed by first class warranties, a fully stocked parts department, and a dealer network with factory supported technicians.

Stärke is Strength - this perfectly describes how we deliver in design, customer service and value. It describes our commitment to worker safety and to our products themselves, each built for years of trouble free service.



#### ISO 14001-2004

Our factory has adopted an effective environmental management system (EMS) that helps to support environmental protection and prevention of pollution. In doing so, we can effectively measure and reduce our environmental footprint.

#### ISO 9001:2008

We take pride in the fact our factory has a certified quality management system in design, development, facturing & service.

Our customers can have confidence in the knowledge that all of our Stärke trucks meet and/or exceed all safety standards required by the current ANSI B56.1.

#### CAN/CSA B335

Stärke Material Handling Group diligently follows the requirements with respect to lift truck design and construction, maintenance and inspection, safe operation, and operator training when it comes to our products. All of our Stärke products meet and/or exceed all safety standards required by the current CAN/CSA B335.





**METARKE** 

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Stärke Material Handling Group 1-877-435-4352 Toll Free: 905-227-7554 Telephone: 905-227-2072 Fax: info@starkeforklift.com Email: www.starkeforklift.com

Stärke Material Handling Group is committed to providing a broad selection of the toughest trucks for the most challenging applications. Every model is designed to deliver optimal efficiency, comprehensive operator ergonomics and safety, and unsurpassed reliability at an unbeatable value for your dollar.









STARKE

#### **ENERGY XVI SERIES 3 & 4 WHEEL AC ELECTRIC FORKLIFTS**

# 3,500-7,000 LB

The Energy XVI Series of Heavy Duty Electric Forklifts from Stärke Material Handling Group

# STÄRKE IS STRENGTH

STARKE





### ENERGY XVI SERIES

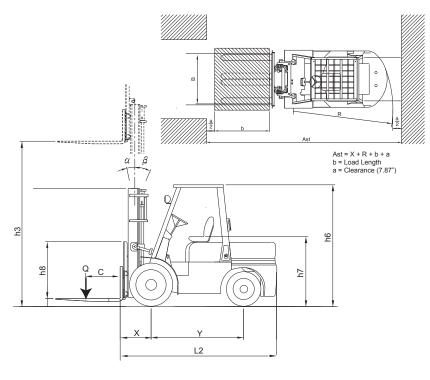
Stärke forklifts are manufactured in an ISO accredited facility to ANSI B56.1 specifications, and use the latest technology, AC powered motors for maximum efficiency and long run time

#### High Performance and Comfort

Starke Model				XVIFBT18	XVIFBT20	XVIFB18	XVIFB20	XVIFB25	XVIFB30	XVIFB35
				3 - WHEEL		4 - WHEEL				
Load Capacity	Q	Load	lb	3500	4000	3500	4000	5000	6000	7000
Load Center	С	Distance	in	2	4	24		24	2	24
System				AC		AC	AC		AC	
Power Type				Electric		Electric	Electric		Electric	
Tire Type		Solid-Resilient or Pneumatic	Front/Rear	Pneumatic/Solid Resilient		Pneumatic/Solid Resilient	Pneumatic/Solid Resilient		Pneumatic/Solid Resilient	
Operation type				Sit		Sit	Sit		Sit	
Mast	h3	Lift*	in	78.7 - 236.0*		78.7 - 236.0*	78.7 - 236.0*		78.7 - 236.0*	
Load Bracket	h8	Height of load bracket	in	48		48	48		48	
Mast tilting angle	a/B	Forward / Back	deg	6/6		6/12	6/10		6/10	
<b>Overall Dimentions</b>	L2	Length to face of forks	in	77.6		80.5	90.2		95.2	
	В	Total width	in	42.9		42.5	47.2		49.6	
	H6	Overhead Guard Height	in	82.3		84.4	84.5		84.5	
	H7	Seat Height	in	39.2		44.5	45.1		45.1	
Turning Radius	R		in	65.0		72.4	79.9		84.3	
Load Distance	Х	From centre of front axle	in	14.6	14.6	15.7	19.7	19.7	20.3	20.3
Aisle width		For load 31.4 x 47.3 / 39.4 x 47.3	in	124.6/131.7	124.6 / 131.7	127.6 / 135.4	139.0 / 146.9	139.0 / 146.9	143.9 / 151.8	143.9 / 151.8
Travel Speed		Laden / unladen	mph	8.4 / 8.7	8.4 / 8.7	8.4 / 8.7	7.8/8.7	7.5/8.7   9.0/9.6	8.7 / 9.3	8.4/9.0
Lifting Speed		Laden / unladen	in/s	12.6 / 18.5	11.8 / 18.5	11.8/18.5	12.2 / 19.7	11.4 / 19.7   11.8 / 19.7	11.4 / 19.7	11.0/19.7
Lowering Speed		Laden / unladen	in/s	18.5 / 21.7	18.5 / 21.7	18.5 / 21.7	18.9/19.7	18.9 / 21.3   16.5 / 17.7	16.5 / 17.7	16.5 / 17.7
Axle Loading		Front - laden / unladen	lbs	9922 / 3093	10472 / 3245	10263 / 3916	11594 / 4653	13046/4972   13750/5401	17446 / 5962	18260 / 6072
		Rear - laden / unladen	lbs	880 / 3749	1100 / 3927	1177 / 3564	1430 / 3971	1672/4246   1760/4609	1584 / 6116	1760 / 6248
Gradeability		Laden / unladen	%	26 / 23	24/21	17 / 22	17 / 23	16/22   17/20	16/19	15/18
Service Weight		Including min. battery weight	lbs	6842	7172	7480	8624	9218   10010	12078	12320
Wheelbase	Υ		in	56.3	56.3	53.1	58.5	58.5	61.7	61.7
Wheels (X:driven)		Number	Front/Rear	2X / 1 (2)		2X / 2	2X / 2		2X / 2	
Tire Size		Front	in	18 x 7-8		21 X 8 X 9-14PR	23 X 9-10-16PR		23 X 9-10-20PR	
		Rear	in	15 x 4 1/2-8		5-8-8PR	18	X 7-8	18 X 7-8	
Battery		Voltage	V	36   48		36   48	36   48	36   48   80	80	
		Min Battery weight **	lbs	1672		1628	2464	2464 / 3256	3256	
		Battery Box Size MAX**		38.25 x 24 x 24.5		44.3 x 29.1 x 24.0	44.3 x 29.1 x 24.0		44.3 x 29.1 x 24.0	
Motor		Drive Motor	hp	5.6 x 2		9.3	9.3	9.3   16	16	
		Pump Motor	hp	16		16	16	16 21	21.0	

#### For the latest revisions visit our website at www.starkeforklift.com

\* Various mast heights ranging from 78.7-270.0" available. See Mast Specification sheet for full details. \*\* All factory specifications are subject to change without notice.



## **FEATURES**

#### **Optimal Performance & Ultimate Productivity**

#### WET DISC BRAKES

• Wet disc brakes are standard on all XVI series 3-wheel models ONLY, assuring dependable and reliable braking performance. • Wet disc brakes with multiple discs require less

maintenance and reduce service cost.

• Sealed for protection from dirt, dust, chemicals & the elements, the wet disc brakes are designed

to create less heat and have a longer life.

#### **BRAKE IMPROVEMENTS**

• Improved braking operations due to larger brake fluid pump and larger brake pedal arm • Reduced braking distance from 13' (old) to 6.5' (XVI Series)

#### Brake oil level alarm

### HYDRAULIC PUMP MOTOR

• AC hydraulic pump motor can be adjusted to low speed output, providing sufficient power for turning and optimal battery charger life.

• The truck's power saving functions enhances the truck's ability to operate for longer periods without reducing productivity or performance.

#### **RELIABLE TRANSMISSION**

• Fully programmable Zapi AC Controller • ZF Transmission • Low Noise, High Safety

- Low maintenance cost
- High reliability, durable

#### Safety & Gold Service

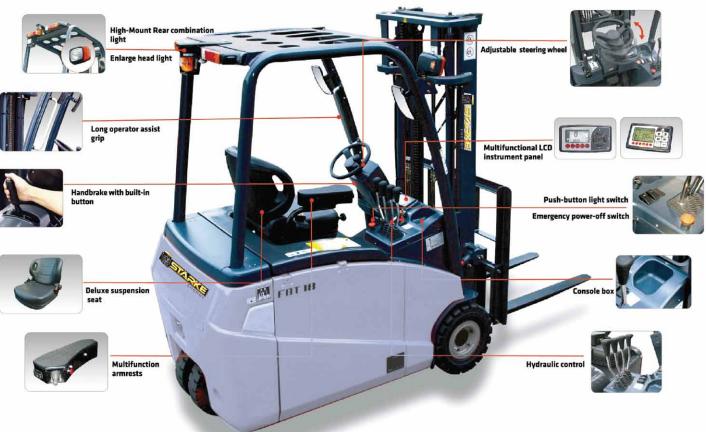
#### **HEAVY DUTY CHASSIS**

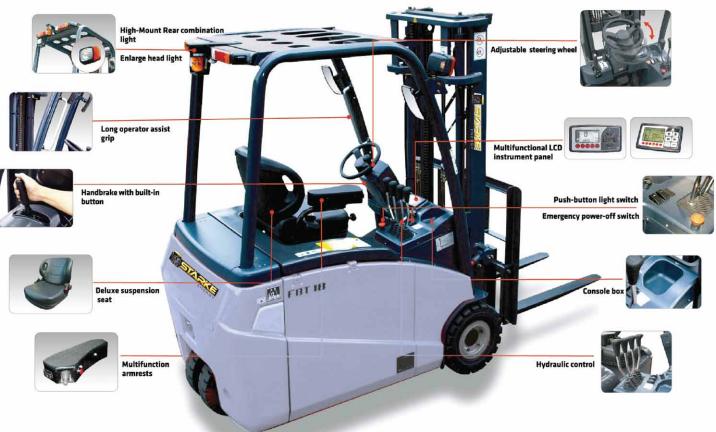
A strong no-bolt integral heavy duty chassis gives the driver 20% more overhead protection.

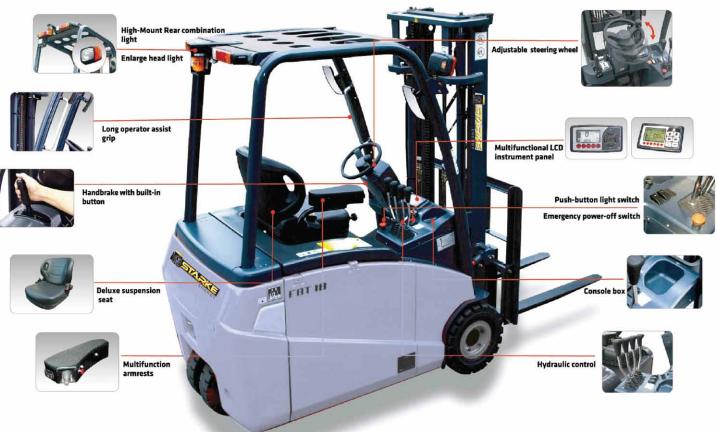


#### HYDRAULIC LOCK OUT

Our new hydraulic lock out system in our electric Energy XVI Series comes standard. It automatically locks off all hydraulic functions and transmission drive if it has not detected the presence of the operator.











#### **Intelligent Ergonomics and Superior Comfort**

ENER DEN

#### Multifunctional LCD Instrument Panel

A large and easy to read multifunctional LCD panel is ergonomically designed to offer ease of use for the operator.

#### **Superior Comfort Cabin**

The new XVI Series is focused on an ergonomic and safe working environment, resulting in operator comfort, efficiency and productivity. The new cabin is designed with virtually no blind spots, and is a comfortable and safe workplace for the operator. The cabin's 360° clear view minimizes the risk of damage to the operator and cargo. A wide range of optional equipment - such as a cabin heater and radio in the interior lining of the overhead guard - are offered to meet multiple needs

#### **Hydraulic Control**

Because it makes sense to expect peace of mind at a fair price

The ergonomic position of the control levers offers easy operation, while the multifunction armrests with F/R control, allows for effortless forward/reverse shifting.

## **STÀRKE**

#### **Improved Turning Radius**

#### HYDRAULIC STEER AXLE

• The new axle provides wider steering angles up to 85 degrees and a tighter turning radius · Compact size allows for greater maneuverability

#### **STEERING WHEEL**

• Smaller steering wheel is easy to operate reducing strain on operator arms and shoulders. • The easy-handling steering wheel column with tilt adjustment helps provide the ideal operating position and improve performance.

### CUSTOMIZE

• Custom factory options including air pre-cleaners, cabins, attachments, fork sizes, seats, masts, LED options & more.

#### Advanced Zapi AC Controller System

- All models come standard with a Zapi fully programmable AC controller
- AC traction & hydraulic motors result in quiet operation / low noise
- Speed controls, torque, lifting, travelling, turning & braking are all fully programmable to match operator & application
- Regenerative braking and efficient AC motors result in long battery run times
- Separately functioning motors assist in turning efficiency resulting in improved turning radius
- Protected from overheat of inverters and motors automatically sending unit into safe mode
- Full protection from shorts, open circuits & reverse polarity of charger cables • Anti-roll back with adjustable ramp stop.



The Zapi anti-rollback system provides a safe ramp operation and an exceptional ramp start capability. The powerful high-output motors provide greater acceleration, improved grade-ability and faster travel speed on any rough terrian or slope.

# **NEW** Wide Mast View

(Hoseless view even with 3rd and/or 4th functions installed)



#### 360° CLEAR VIEW



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