



# EXU-SF/ECU-SF Technical Data Low Lift Pallet Truck with Hinged Platform

EXU-SF 20/Li-lon

ECU-SF 20



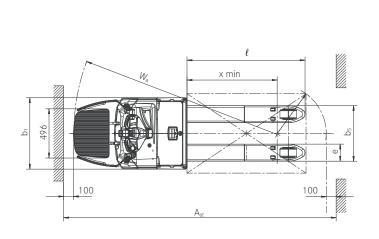
first in intralogistics

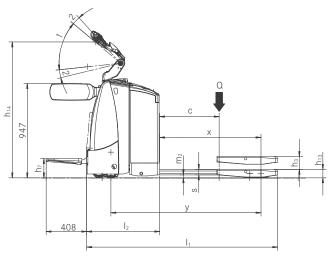
## EXU-SF Low Lift Pallet Truck with Hinged Platform Precision and manoeuvrability

This specification sheet to VDI Guidelines 2198 only provides technical values for the standard truck. Different tyres, other masts, additional equipment etc. may produce different figures.



		1.1	Manufacturer				STILL	
× ×		1.2	Manufacturer's type designation				EXU-SF 20/Li-lo	n
2	0	1.3	Drive			Electric		
2	20	1.4	Operator type				Standing/pedestr	ian
		1.5	Capacity/load		Q	kg	2000	
Distinguishing marks	20	1.6	Load centre distance		С	mm	600	
5	25	1.8	Load distance		X	mm	1023 <sup>2</sup>	
	_	1.9	Wheel base		У	mm	1518 <sup>2</sup>	1589 <sup>2</sup>
c		2.1	Service weight (incl. battery)		,	kg	754	866
Woighte	20	2.2	Axle load, laden	drive end/load end		kg	1090/1664	1242/1624
×	2	2.3	Axle load, unladen	drive end/load end		kg	590/164	678/188
		3.1	Tyres	, , , , , , , , , , , , , , , , , , , ,		0	Polyurethane	,
Tyres/chassis	2	3.2	Tyre size	drive end		mm	Ø 230 x 75	
9	9	3.3	Tyre size			mm	2 x Ø 85 x 80	
,	2	3.4	Support castors	drive end		mm	Ø 140 x 54 (Ø 11	0 x 60) 1
1	7	3.5	Number of wheels (x = driven)	drive end/load end			1 x -2/4	,
		3.6	Tread	drive end/load end	b <sub>10</sub> /b <sub>11</sub>	mm	495/388	
		4.4	Lift	·	h <sub>3</sub>	mm	130	
		4.8	Seat height/standing height (platform)		h <sub>7</sub>	mm	198	
		4.9	Height of tiller in driving position	min./max.	h <sub>14</sub>	mm	1120/1370	
		4.15	Height lowered		h <sub>13</sub>	mm	85	
9	2	4.19	Overall length without load	platform closed/open	I <sub>1</sub>	mm	1925/2333	2001/2409
Oimonoiono	0101	4.20	Length to face of forks	platform closed/open	l <sub>2</sub>	mm	735/1143	811/1219
2	D D	4.21	Total width		b <sub>1</sub>	mm	720	
2	2	4.22	Fork dimensions		s/e/l	mm	55/172/1190	
		4.25	Overall fork width		b <sub>5</sub>	mm	560	
		4.32	Ground clearance, centre of wheel base		$m_2$	mm	30	
		4.34	Working aisle width with 800 x 1200 pallet lengthways (b <sub>12</sub> x l <sub>6</sub> )	platform closed/open	$A_{st}$	mm	2134/2746 <sup>3</sup>	2210/2822 <sup>3</sup>
		4.35	Turning radius	platform closed/open	Wa	mm	1752 <sup>2</sup> /2165 <sup>2</sup>	1833 <sup>2</sup> /2241 <sup>2</sup>
		5.1	Travel speed	laden/unladen		km/h	7.5/9.0 (8.5/10	)
5	2	5.2	Lift speed	laden/unladen		m/s	0.093/0.093	
Dorformanoo	9	5.3	Lowering speed	laden/unladen		m/s	0.14/0.11	
ş	5	5.7	Gradeability	laden/unladen		%	10/20	
۵		5.9	Acceleration time (over 10 m)	laden/unladen		S	6.9/5.4	6.9/5.5
		5.10	Service brake				Electromagnetic	
	_	6.1	Drive motor, rating S2 = 60 min			kW	2.3	
2	υ	6.2	Lift motor, rating at S3			kW	2.2/8%	
2	20	6.3	Battery according to DIN 43531/35/36; A, B, C, no				2PzS	3PzS
Eloctric chains	2 122	6.4	Battery voltage/nominal capacity K <sub>5</sub>			V/Ah	24/250 Li-lon: 24/82	24/375
à		6.5	Battery weight ±5% (depends on make)			kg	212	288
		6.6	Energy consumption according to VDI cycle			kWh/h	1.06	1.20
the second	<u> </u>	8.1	Drive control				AC control	
Ž	5	8.4	Sound level at driver's ear			dB(A)	66	





Top view Side view

<sup>&</sup>lt;sup>1</sup> with STILL DRIVEspeed <sup>2</sup> initial lift lowered; initial lift raised = -133mm

<sup>&</sup>lt;sup>3</sup> initial lift raised

# EXU-SF Low Lift Pallet Truck with Hinged Platform Turning Radius

Turning radius  $W_{\text{a}}$  and load distance x with lowered initial lift

Fork length $\ell$		Distance x	Unfolded Platform	Folded Platform	Distance x	Unfolded Platform	Folded Platform
			250 Ah	250 Ah		350 Ah	350 Ah
990	mm	823	1965	1552	823	2041	1633
990	mm	805	-	-	805	2023	1615
1190	mm	1023	2165	1752	1023	2241	1833
1190	mm	1005	-	-	1005	2223	1815
1600	mm	1433	2575	2162	1433	2651	2243
1600	mm	1415	-	-	1415	2633	2225
1 2390	mm	-	-	-	2205	3423	3015
2 2390	mm	-	-	-	1847	3065	2657

 $<sup>^{\</sup>scriptscriptstyle 1}$  Wheel base suitable for lifting three Euro pallets crossways

## **Detailed Photos**



The optional combi-tiller increases the safety distance to the operator, ensuring even greater safety during operation



All-round safety: height-adjustable side guards keep the driver safe and stable, and provide optimal protection in all driving situations



Battery changing made easy: optional lateral battery change for even greater availability and improved ergonomics



Protects the back: the air-cushioned stand-on platform can be adjusted to individual driver's weight



 $\label{thm:maximum driver protection: sensitive impact plate in the optimal position plus height-adjustable foot guard$ 

<sup>&</sup>lt;sup>2</sup> Wheel base suitable for lifting two Euro pallets lengthways

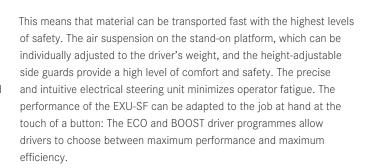
# EXU-SF Low Lift Pallet Truck with Hinged Platform Precision and manoeuvrability

Protects the back: the air-cushioned stand-on platform can be adjusted to individual driver's weight

Maximum safety distance: the optional combi-tiller increases the safety distance to the operator, ensuring even greater safety during operation

All-round safety: height-adjustable side guards keep the driver safe and stable, and provide optimal protection in all driving situations

The powerful EXU-SF low lift pallet truck from STILL with a hinged platform and a load capacity of up to 2,000 kg is designed for work in very narrow spaces and for transporting goods horizontally. This compact warehouse helper can be manoeuvred accurately and safely in narrow spaces. All of which makes it the ideal choice for loading and unloading lorries. The truck enables goods to be turned around fast over multiple shifts in the industrial sector and rapid material handling in retail environments. The unique STILL combi-tiller can be folded down to increase speed in pedestrian mode.





### Power

- Powerful, reliable and low-maintenance AC drive motor
- The right driving programme for all situations: Select maximum turnaround or maximum efficiency: ECO or BOOST
- Enough power for multiple shifts: high battery capacity and optional lateral battery changing
- Extreme availability: the lithium-ion battery possesses incredible energy and allows for quick and easy interim charging
- Outstanding reliability: reinforced fork tips for demanding jobs on ramps

### Precision

- Fatigue-free operation thanks to precise and intuitive electrical steering unit
- Rounded forks are easier to thread into pallets
- Complete control: smooth, accurately controlled starting and acceleration behaviour
- Precise operation even in confined spaces thanks to compact tiller shape

### Ergonomics

- Protects the back: air-cushioned stand-on platform can be adjusted to individual driver's weight
- Ergonomic and intuitive operation: driving, lifting and steering processes can be simultaneously controlled by left- or right-handed operators using just one hand
- Optional lateral battery change for even greater availability

### Compactness

- High pallet reloading rate: compact size allows for quick and safe operation
- The truck's compact dimensions, articulated tiller and outstanding manoeuvrability allow work to be carried out in narrow aisles

### Safety

- All-round safety: height-adjustable side guards keep the driver safe and stable, and provide optimal protection in all driving situations
- Optional combi-tiller increases the safety distance, which enables an increased maximum speed of 6 km/h in pedestrian mode
- Safe around corners: curve speed control automatically adapts speed to the steering angle when cornering
- Maximum driver protection: sensitive impact plate in the optimal position
- Accidental roll-back eliminated: automatic stop function also on ramps

## **Environmental Responsibility**

- Low operating costs: low energy consumption and long maintenance intervals
- ECO driving programme: maximum energy efficiency at the touch of a button
- Very few noise emissions due to extremely quiet drive and lifting motor
- Over 95 percent of all materials used are recyclable

# EXU-SF Low Lift Pallet Truck with Hinged Platform Equipment Variants



	EXU-SF 20
Air-cushioned, individually adjustable stand-on platform for maximum operator comfort	•
Air-cushioned stand-on platform with preset cushioning settings for high levels of operator comfort	0
Adjustable DIN A4 writing pad	0
Load capacity of 2 tonnes	•
Easy-grip tiller for left- and right-handed operators	•
Provision for STILL data terminal or scanner	0
Two driver programmes (ECO and BOOST) for optimum efficiency or maximum performance	•
Two driver programmes (ECO and BOOST) for optimum efficiency or maximum performance Various fork lengths	0
Display	0
Cold storage version	0
High-performance AC drive motor has very low maintenance costs	•
Sensitive electrical steering unit minimizes operator fatigue	•
STILL DRIVEspeed	0
Accessories bracket	0
Drive wheel tyres, polyurethane	•
Drive wheel tyres, polyurethane, profiled	0
Drive wheel tyres, solid rubber	0
Drive wheel tyres, solid rubber, profiled	0
Drive wheel tyres, solid rubber, natural-coloured	0
Prive wheel tyres, solid rubber, natural-coloured, profiled	0
Load roller tyres, polyurethane, single	0
Load roller tyres, polyurethane, tandem	•
Load roller tyres, polyurethane, single, lubricated axles and lifting link	0
Load roller tyres, polyurethane, tandem, lubricated axles and lifting link	0
FleetManager: access authorisation, shock detection, reports	0
Combi-tiller steering for high efficiency and safety levels	0
PIN code access	0
Foot guard	0
Access authorisation STILL key	•
Individual height-adjustable side guards for greater safety while working	•
Load backrest	0
Battery compartment for 200 to 250 Ah battery, for changing batteries with a crane	•
Battery compartment for 300 to 375 Ah battery, for changing batteries with a crane	0
Battery compartment for 200 to 250 Ah battery, for changing batteries with a lateral battery changing system	0
Battery compartment for 300 to 375 Ah battery, for changing batteries with a lateral battery changing system	0
82 Ah STILL Li lon battery	0
164 Ah STILL Li-lon battery	0
205 Ah STILL Li-Ion battery	0
410 Ah STILL Li-Ion battery	0
Built-in charger with protection to prevent operator unintentionally driving while battery is charging	0

● Standard ○ Optional — Not available

# EXU-SF Low Lift Pallet Truck with Hinged Platform Precision and manoeuvrability



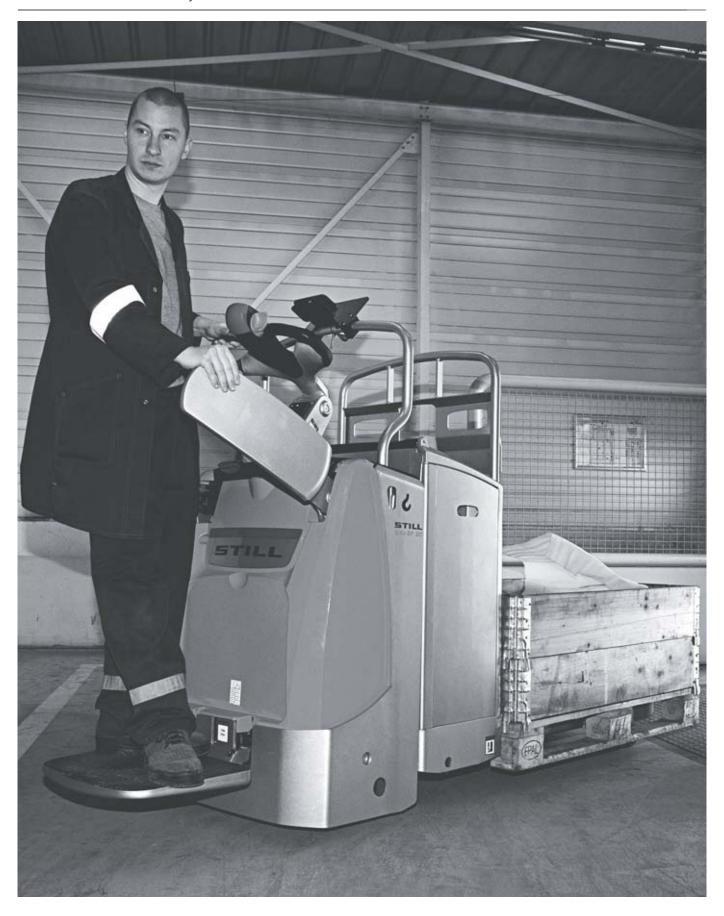
The EXU-SF also offers maximum safety levels in pedestrian mode. The unique combi-tiller increases the safety distance, enabling operators to reach speeds of up to 6 km/h even in pedestrian mode. The tiller can be folded up for use in narrow spaces. In this case, operators are still protected against accidents as the truck speed is automatically adapted to 4 km/h.



Comfortable driving: In ride-on mode on the optimally cushioned stand-on platform, the truck can reach speeds of up to 6 km/h when the side guards are folded up.



Even greater handling performance possible. With the side guards are folded down, drivers are protected even at high speeds. This ensures even more effective material handling with driving speeds of up to 9 km/h.

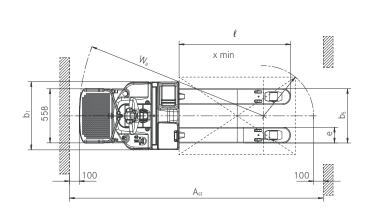


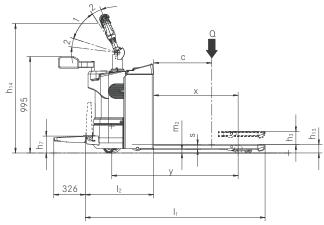
## ECU-SF Low Lift Pallet Truck with Hinged Platform Precision and manoeuvrability

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	1.1	Manufacturer				STILL
S)	1.2	Manufacturer's type designation				ECU-SF
nar	1.3	Drive				Electric
. <u>E</u>	1.4	Operator type				Standing/pedestrian
nish	1.5	Capacity/load		Q	kg	2000
Distinguishing marks	1.6	Load centre distance		С	mm	600 <sup>1</sup>
Dist	1.8	Load distance		Х	mm	872
	1.9	Wheel base		У	mm	1304
S	2.1	Service weight (incl. battery)			kg	654 <sup>1</sup>
igh	2.2	Axle load, laden	drive end/load end		kg	1676/978
Weights	2.3	Axle load, unladen	drive end/load end		kg	79/575
	3.1	Tyres				Polyurethane
Tyres/chassis	3.2	Tyre size	drive end		mm	Ø 85 x 90
-G	3.3	Tyre size	load end		mm	Ø 230 x 100
yres	3.5	Number of wheels (x = driven)	drive end/load end			1x-2/2
<u> </u>	3.6	Tread	drive end/load end	$b_{10}/b_{11}$	mm	398/485
	4.4	Lift		h <sub>3</sub>	mm	135
	4.9	Height of tiller in driving position	min./max.	h <sub>14</sub>	mm	1145/1342
	4.15	Height lowered		h <sub>13</sub>	mm	85
	4.19	Overall length without load	platform closed/open	I <sub>1</sub>	mm	1854/2180 <sup>1</sup>
ns	4.20	Length to face of forks	platform closed/open	12	mm	704/1030
Dimensions	4.21	Total width		b <sub>1</sub>	mm	710
ime	4.22	Fork dimensions		s/e/l	mm	50/162/1150
	4.25	Overall fork width		b <sub>5</sub>	mm	560
	4.32	Ground clearance, centre of wheel base		$m_2$	mm	33
	4.33	Working aisle width with 1000 x 1200 pallet crossways	platform closed/open	A <sub>st3</sub>	mm	1925 <sup>2</sup> /2604 <sup>2</sup>
	4.34	Working aisle width with 800 x 1200 pallet lengthways (b <sub>12</sub> x l <sub>6</sub> )	platform closed/open	A <sub>st3</sub>	mm	2125/2622
	4.35	Turning radius	platform closed/open	Wa	mm	1597/1904
	5.1	Travel speed	laden/unladen		km/h	6/6 (7.5 <sup>3</sup> )
nce	5.2	Lift speed	laden/unladen		m/s	0.034/0.045
rma	5.3	Lowering speed	laden/unladen		m/s	0.045/0.045
Performance	5.7	Gradeability	laden/unladen		%	0.7 1,4/10.2 1,4
4	5.8	Max. gradeability kB5	laden/unladen		%	4.7 1,4/21.3 1,4
	5.10	Service brake			1.147	Electromagnetic
a	6.1	Drive motor, rating S2 = 60 min			kW	1.2
gin	6.2	Lift motor, rating at S3			kW	1.2
Electric engine	6.3	Battery according to DIN 43531/35/36; A, B, C, no			\/ / A I-	DIN 43535 B
ectr	6.4	Battery voltage/nominal capacity K₅			V/Ah	24/250
击	6.5	Battery weight ±5% (depends on make)			kg	220
_	6.6	Energy consumption according to VDI cycle			kWh/h	1.06
Other	8.1	Drive control			dD(A)	Pulse control
0	8.4	Sound level at driver's ear			dB(A)	<70





Top view Side view

 $<sup>^1</sup>$  for fork  $\ell=$  1150 mm,  $b_5=$  560 mm  $^2$  for fork length  $\ell=$  980 mm  $^3$  when platform is unfolded and guard is open

<sup>&</sup>lt;sup>4</sup> when platform is unfolded

# ECU-SF Low Lift Pallet Truck with Hinged Platform Turning Radius

Turning radius Wa for determining the working aisle width

Fork length /		Load centre c in mm	Distance x in mm	Wheel base y in mm	Turning radius W₃ in mm		Overall length I <sub>1</sub> in mm		
					Platform folded	Platform unfolded	Platform folded	Platform unfolded	
800	mm	400	522	952	1247	1554	1504	1830	
980	mm	500	702	1132	1427	1734	1684	2010	
1150	mm	600	872	1302	1597	1904	1854	2180	
1450	mm	715	1172	1602	1897	2204	2154	2480	
1600	mm	800	1322	1752	2047	2354	2304	2630	

<sup>&</sup>lt;sup>1</sup> Fork lifted

## **Detailed Photos**







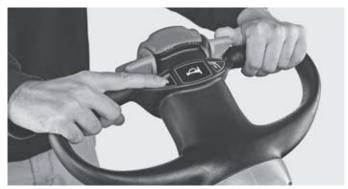
Outstanding flexibility for every job: Thanks to its hinged, stand-on platform and side guards, the truck can be adapted to all warehouse conditions, including very narrow warehouses, aisles with requisite speed restrictions and jobs over long distances



Always available: Sufficient energy for extended use and possibility of changing the battery



All-round safety: Optional side guards can be easily and quickly lowered, keeping drivers safe and stable, and providing optimal protection in all driving situations



Ergonomic and intuitive operation: driving, lifting and steering processes can be controlled single-handedly by either left- or right-handed operators



Effective material handling: Up to 2,000 kg lifting capacity and maximum speed of 7.5 km/h  $\,$ 

# ECU-SF Low Lift Pallet Truck with Hinged Platform Precision and manoeuvrability

Fast and safe: optional side guards can be opened and closed using just one hand

Perfect ergonomics: stand-on platform is just 170 mm high, allowing operators to easily mount and dismount

High pallet reloading rate: compact size allows for quick and safe operation

The powerful ECU-SF low lift pallet truck from STILL features a hinged platform and a load capacity of 2,000 kg, making it the ideal choice for loading and unloading lorries and for transporting goods horizontally. This compact warehouse helper can be manoeuvred accurately and safely in narrow spaces. Its rounded forks can be easily threaded into pallets. This low-maintenance truck gets the job done reliably, from lightweight jobs over multiple shifts in the industrial sector to handling material in retail environments.



The chassis is covered with shock-resistant plastic, providing the robust truck with outstanding protection in harsh environments. The platform on the ECU-SF is very low at just 170 mm. This enables operators to quickly and safely get on and off the stand-on platform. The precise and intuitive electrical steering unit minimizes operator fatigue and enables goods to be turned around fast. Optional side guards keep the driver safe and stable, and provide optimal protection in all driving situations. These can be opened and closed using just one hand.

## **Extensive Equipment**

#### Power

- Effective material handling: up to 2,000 kg lifting capacity and maximum speed of 7.5 km/h
- Powerful, reliable and low-maintenance drive motor
- Outstanding reliability: robust outer panels can withstand forceful impacts.
- Sufficient energy for extended use: high battery capacity with 24-volt technology
- Maximum speeds for different situations: 6 km/h in pedestrian mode and 7.5 km/h in ride-on mode when side guards are folded down

### Precision

- Fatigue-free operation thanks to precise and intuitive electrical steering unit
- Rounded forks are easier to thread into pallets
- Complete control: smooth, accurately controlled starting and acceleration behaviour
- Precise operation even in the most confined spaces thanks to compact shape

### Ergonomics

- Ergonomic and intuitive operation: driving, lifting and steering processes can be simultaneously controlled by left- or right-handed operators using just one hand
- The ECU-SF can be accurately steered in all conditions thanks to the ergonomic layout of control elements
- Easy to board: the platform is just 170 mm high and can be boarded very easily and effortlessly
- Relaxed working conditions: perfectly cushioned stand-on platform ensures comfortable working conditions
- The side guards can be simultaneously opened and closed using only one hand

### Compactness

- High pallet reloading rate: compact size allows for quick and safe operation
- The truck's compact dimensions, hinged stand-on platform and outstanding manoeuvrability allow work to be carried out in very narrow aisles
- Working in confined spaces: flowing lines and compact dimensions enable work to be carried out in HGVs
- The battery is protected from damage even in confined spaces: the battery compartment is made from a continuous plate to protect against impacts

### Safety

- Optional side guards keep the driver safe and stable, and provide optimal protection in all driving situations
- Maximum driver protection: sensitive impact plate in the optimal position
- Accidental roll-back eliminated: automatic stop function also on ramps
- Non-slip mat on the stand-on platform keep drivers in a stable position

## **Environmental Responsibility**

- Energy efficient due to energy recovery when braking
- Very few noise emissions due to extremely quiet drive and lifting motor
- Over 95 percent of all materials used are recyclable

# ECU-SF Low Lift Pallet Truck with Hinged Platform Equipment Variants



		ECU-SF
	Ergonomics adapted for maximum comfort and safety	•
	Cushioned, hinged stand-on platform for outstanding user comfort	•
	Large writing pad with document clamp	•
General	Load capacity of 2 tonnes	•
Gen	Easy-grip tiller for left- and right-handed operators	•
	Various fork lengths	0
	Cold storage version	0
	The intuitive electrical steering unit reduces operator fatigue to a minimum	•
	Drive wheel tyres, polyurethane	•
S	Drive wheel tyres, solid rubber	0
Tyres	Extendible wheels of solid rubber for lateral pallet lifting	0
_	Load roller tyres, polyurethane, single	•
	Load roller tyres, polyurethane, tandem	0
Safety	Hinged side guards increase speed to 7.5 km/h	0
2	Built-in charger	0
Battery	Battery compartment for battery up to 250 Ah, for changing batteries with a crane	•
ä	Battery compartment for battery up to 300 Ah, for changing batteries with a crane	0

● Standard ○ Optional — Not available





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STILL is certified in the following areas: Quality management, occupational safety, environmental protection and energy management.

