

Entry Section

Effortless Operation, Handled by One



Uncoiler



Double Mandrel Rotatable Uncoiler
for tube sizes of $< \phi 89\text{mm}$



Single Mandrel Uncoiler
for tube sizes of $\phi 89\text{mm} - \phi 219\text{mm}$



Cone-head/Cantilever Alignment
Uncoiler for tube sizes of $> \phi 219\text{mm}$

- Bidirectional rotating: top & bottom unwinding capability
- Closed loop control provide real-time main axial torque regulation and prevent loose coil
- Heavy duty design to meet the most demanding circumstances

Flattener



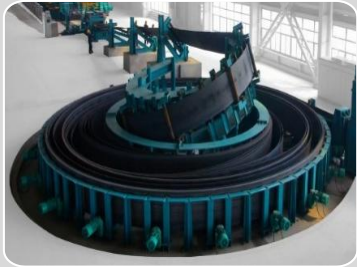
- Electrically adjustable vertical rolls for precious alignment
- Heat-treated leveling roll delivers long-term reliability
- Proportional pressure adjustment matches pressure with strip thickness for superior leveling

Shear End Welder



- Angular shearing with spiral weld seams improves tube strength and protects the mill
- Stable welding speed delivers enhanced wire penetration and superior welding quality
- Weld seam miller to remove excessive weld beading and prevent forming rolls from scratching
- Automatic alignment of coil head and tail, effortless operation, proxy control box installation

Horizontal Spiral Accumulator - Industrial pioneer and leadership in China



- Mature design with mechanical theories to ensure no jamming, folding, deformation, or scratch during the whole process even for ultra thin and ultra wide strips
- Heavy-duty design and robust structure ensuring reliable performance under sustained heavy loads
- Unmanned operation, equipped with empty and full storage detection, alarm warning and real-time monitoring

Technical Data Sheet

Model No.	Strip Width (mm)	Strip Thickness (mm)	Accumulator Storage Capacity (m)	Accumulator Feed-in Speed (m/min)	ID of Coil (mm)	OD of Coil (mm)	Weight of Coil (T)
TB32	40 - 100	0.6 - 1.5	400-1000	Max.260	420 - 508	Max.1800	Max.1.6
TB60	60 - 200	0.8 - 3.0	400-1000	Max.260	420 - 508	Max.1800	Max.2.5
TB76	100 - 260	1.0 - 3.5	400-1000	Max.260	420 - 508	Max.1800	Max.4.0
TB89	100 - 300	1.5 - 4.0	400-1000	Max.180	420 - 508	Max.2000	Max.5.0
TB114	120 - 360	1.5 - 4.0	400-900	Max.180	420 - 508	Max.2000	Max.7.0
TB127	150 - 400	1.5 - 4.0	400-900	Max.180	420 - 508	Max.2000	Max.7.0
TB140	150 - 440	1.8 - 5.0	400-900	Max.180	420 - 508	Max.2000	Max.8.0
TB165	160 - 520	2.0 - 6.0	400-800	Max.180	420 - 508	Max.2000	Max.8.0
TB193	240 - 610	2.5 - 8.0	500-700	Max.120	420 - 508	Max.2000	Max.12.0
TB219	275 - 700	2.5 - 8.0	500-700	Max.120	450 - 550	Max.2000	Max.15.0
TB254	320 - 800	3.5 - 10.0	500-700	Max.120	450 - 550	Max.2000	Max.16.0
TB273	355 - 900	3.5 - 10.0	500-700	Max.120	450 - 550	Max.2000	Max.18.0
TB325	440 - 1100	4.0 - 12.0	500-800	Max.120	450 - 550	Max.2000	Max.25.0
TB355	600 - 1115	4.0 - 14.0	500-800	Max.120	450 - 550	Max.2000	Max.25.0
TB406	605 - 1300	5.5 - 16.0	500-800	Max.120	580 - 760	Max.2000	Max.30.0
TB426	700 - 1340	6.0 - 16.0	500-800	Max.120	580 - 760	Max.2000	Max.30.0
TB508	795 - 1650	6.0 - 20.0	400-800	Max.100	610 - 760	Max.2000	Max.35.0
TB610	860 - 1920	6.0 - 20.0	400-800	Max.100	610 - 760	Max.2000	Max.35.0
TB630	900 - 2000	6.0 - 20.0	400-800	Max.100	780 - 860	Max.2000	Max.40.0
TB660	900 - 2200	6.0 - 22.0	400-800	Max.100	780 - 860	Max.2000	Max.40.0

Forming & Sizing

Precisions, Robustness, Automation and Productivities

Conventional Forming (W Forming)



ZJ32



ZJ114



ZJ165

- High-precision forming stands with cardan shafts, guaranteeing tube diameter accuracy.
- Ensuring optimal performance and maximize throughput, this approach not only boosts production rate but also extends the lifespan of machinery by reducing wear and tear.
- Optimized serviceability for maintenance and operation

Flexible Forming (FF / FFX)



ZJ219



ZJ325



ZJ710

- Minimize roll replacement duration and cuts rollers expenses by 40-60%.
- No adjustment is needed for the rollers within the tolerable range of round and square tubes
- Reducing the need for human intervention, lowering labor costs and minimizing operator error.

Direct Forming (DFT)



ZJ-DFT80x80



ZJ-DFT200X200



ZJ-DFT500X500

- Great flexibility to modify the tube dimensions without any roll changes in the mill size range.
- Complete automation to increase productivity and lower maintenance costs.
- One-click for the adjustment of roll angles and positions when changing specifications.
- Individual servo controller for control redundancy, no interference for others while one motor/controller fails
- Control logic considers thickness factor applied on the corner radius for better RHS profiles

Forming & Sizing

Precisions, Robustness, Automation and Productivities

Quick Change System



Hydraulic Spline Joint



Rafted System



Shaft Assembly

- The whole shaft can be lifted out of the horizontal stand for a quick changeover in minutes
- Automatic engagement and disengagement of the universal shaft via hydraulic cylinder
- Rolls can be prepared, installed and adjusted offline, without interrupting the operation
- While roll change is being performed offline, another pre-assembled set of the shaft assembly can be reinstalled onto the horizontal stand to complete the changeover

Technical Data Sheet

Model No.	Size (mm)	Thickness (mm)	Forming Method	Roll Quick Change
ZJ32	Φ12 - Φ32; □10 - □25	0.6 - 1.5	W	Roller changing trolley
ZJ60	Φ16 - Φ60; □15 - □50	0.8 - 3.0	W	Roller changing trolley
ZJ76	Φ25 - Φ76; □25 - □60	1.0 - 3.5	W	Rafted System
ZJ89	Φ32 - Φ89; □30 - □70	1.5 - 4.0	W	Rafted System
ZJ114	Φ40 - Φ114; □32 - □90	1.5 - 4.0	W	Rafted System
ZJ127	Φ48 - Φ127; □35 - □100	1.5 - 4.0	W	Rafted System
ZJ140	Φ60 - Φ140; □40 - □110	1.8 - 5.0	W	Rafted System
ZJ165	Φ76 - Φ165; □60 - □130	2.0 - 6.0	W / DFT	Rafted System
ZJ193	Φ89 - Φ193; □65 - □150	2.5 - 8.0	W / FF / DFT	Shaft Assembly
ZJ219	Φ89 - Φ219; □70 - □170	2.5 - 8.0	W / FF / DFT	Shaft Assembly
ZJ254	Φ114 - Φ254; □80 - □200	3.5 - 10.0	W / FF / DFT	Shaft Assembly
ZJ273	Φ140 - Φ273; □90 - □220	3.5 - 10.0	FF / DFT	Shaft Assembly
ZJ325	Φ165 - Φ325; □130 - □250	4.0 - 12.0	FF / DFT	Shaft Assembly
ZJ355	Φ165 - Φ355; □150 - □300	4.0 - 14.0	FFX / DFT	Shaft Assembly
ZJ406	Φ219 - Φ406; □180 - □300	5.5 - 16.0	FFX / DFT	Shaft Assembly
ZJ426	Φ254 - Φ426; □180 - □350	6.0 - 16.0	FFX / DFT	Shaft Assembly
ZJ508	Φ273 - Φ508; □200 - □400	6.0 - 20.0	FFX / DFT	Shaft Assembly
ZJ610	Φ273 - Φ610; □220 - □480	6.0 - 20.0	FFX / DFT	Shaft Assembly
ZJ630	Φ325 - Φ630; □250 - □500	6.0 - 20.0	FFX / DFT	Shaft Assembly
ZJ660	Φ355 - Φ630; □300 - □500	6.0 - 22.0	FFX / DFT	Shaft Assembly

Single Blade Cold Saw Cutoff & High-Speed Cold Milling Cutoff



LFJ76



LFJ114



LFJ127



LFJ165

Orbital Milling Cutoff



XFJ165 – r,φ



XFJ-200F – r,φ



XFJ219 – r,φ



XFJ533 – r,φ



GXFJ165 – x,y



XFJ250F – x,y



XFJ350F – x,y



XFJ630 – x,y

- Patented mechanic structure and cutting calculation to guarantee burr-free cutting surface, low noise, and less impairment even for various high-grade materials
- Advanced program design, capable of cutting both circular and square and rectangular tubes
- Specially designed clamp actuated hydraulically for reliability, which ensure the cutting accuracy and cutting face quality while extending the blade service life and saving costs
- Sophisticated programming for S-curve control of travelling carriage starting and returning, to minimize mechanical shock and to increase the service life of transmission mechanism
- Patented design of rectangular coordinate profiling feeding system for specific suitability to cut section tubes of mid-to-large size
- Easy operation, with convenient accesses to cutting parameter setting, servo positioning monitoring, alarming, real-time operation status and on-line various cut length setting

Technical Data Sheet

Model No.	Size (mm)	Thickness (mm)	Cut Length (m)	Cut Tolerance (mm)	Mill Speed (m/min)	Qty. of Saw Blade	Material of Saw Blade
LFJ32	Φ12- 32; □10 - □25	0.6 - 1.5	4.0 - 12.0	≤±2	Max.150	1	TCT/HSS
LFJ60	Φ16 – 60; □15 - □50	0.8 - 3.0	4.0 - 12.0	≤±2	Max.130	1	TCT/HSS
LFJ76	Φ25 – 76; □25 - □60	1.0 - 3.5	4.0 - 12.0	≤±2	Max.120	1	TCT/HSS
LFJ89	Φ32 – 89; □30 - □70	1.5 - 4.0	4.0 - 12.0	≤±2	Max.120	1	TCT/HSS
LFJ114	Φ40 – 114; □32 - □90	1.5 - 4.0	4.0 - 12.0	≤±2	Max.110	1	TCT/HSS
LFJ127	Φ48 – 127; □35 - □100	1.5 - 4.0	4.0 - 12.0	≤±2	Max.100	1	TCT/HSS
LFJ140	Φ60 – 140; □40 - □110	1.8 - 5.0	4.0 - 12.0	≤±2	Max.100	1	TCT/HSS
GXFJ165	Φ76 – 165; □60 - □130	2.0 - 6.0	4.0 - 12.0	≤±2	Max.80	2	TCT/HSS
GXFJ193	Φ89 – 193; □65 - □150	2.5 - 8.0	4.0 - 12.0	≤±2	Max.70	2	TCT
XFJ219	Φ89 – 219; □70 - □170	2.5 - 8.0	4.0 - 12.0	≤±2	Max.60	2	TCT
XFJ254	Φ114 – 254; □80 - □200	3.5 - 10.0	4.0 - 12.0	≤±3	Max.50	2	TCT
XFJ273	Φ140 – 273; □90 - □220	3.5 - 10.0	4.0 - 12.0	≤±3	Max.50	2	TCT
XFJ325	Φ165 – 325; □130 - □250	4.0 - 12.0	4.0 - 12.0	≤±3	Max.40	2	TCT
XFJ355	Φ193 – 355; □150 - □300	4.0 - 14.0	4.0 - 12.0	≤±3	Max.30	2	TCT
XFJ406	Φ219 – 406; □180 - □300	5.5 - 16.0	4.0 - 12.0	≤±3	Max.30	2	TCT
XFJ426	Φ254 – 426; □180 - □350	6.0 - 16.0	4.0 - 12.0	≤±3	Max.30	2	TCT
XFJ508	Φ273 – 508; □200 - □400	6.0 - 20.0	4.0 - 12.0	≤±3	Max.25	2	TCT
XFJ610	Φ325 – 610; □220 - □480	6.0 - 20.0	4.0 - 12.0	≤±3	Max.25	2	TCT
XFJ630	Φ355 – 630; □250 - □500	6.0 - 20.0	4.0 - 12.0	≤±3	Max.25	2	TCT
XFJ660	Φ406 – 660; □300 - □500	6.0 - 22.0	4.0 - 12.0	≤±3	Max.25	2	TCT