



Center Pivot + Towable Pivot + Lateral Move
RAINFINE IRRIGATION CO.,LTD.

Why Rainfine ?

To save people from poverty and hunger
world over, we should work hard everyday.

RAINFINE
Irrigation Solution.

易三集團 RAINFINE
YISAN GROUP Irrigation Solution

... **500**
Set/Year

Production 500 sets/year.



RAINFINE irrigation

We have started to make pivot irrigation machines since 2002.
 We have good design of toolings and dies for mass production.
 We are certified by ISO9001 system.
 We have a great team for technical development.
 We have efficient installation and training program.
 We have a good team for after sale services.

Our products are mainly supplied to USA,
 Argentina, Australia, Brazil, Chile, Ghana,
 Germany, Ethiopia, France, New Zealand, Libya,
 Mongolia, Iraq, Paraguay, Saudi Arabic, Sudan,
 UAE, Zambia, Kazakhstan and Russia.



RAINFINE 锐丰

- a. Warehouse in Dalian Free Trade Zone for international market.
- b. Warehouse in Dalian factory for domestic market.
- c. COSCO works as our partner for warehousing logistics and shipment management.
- d. No errors in shipment of all components.



... **800**
Meters

The longest pivot can be 800 meters.



Center Pivot

One end of the machine is fixed and other spans move clock wise by motor driven tires, this system is called fixed center pivot system.

River water or bore well water is supplied from the fixed point, transferred through main pipes and sprinklers, applied to the field. The advantage of this system is to use less labor and water resources to irrigate 13ha- 200ha from one water feeding point.

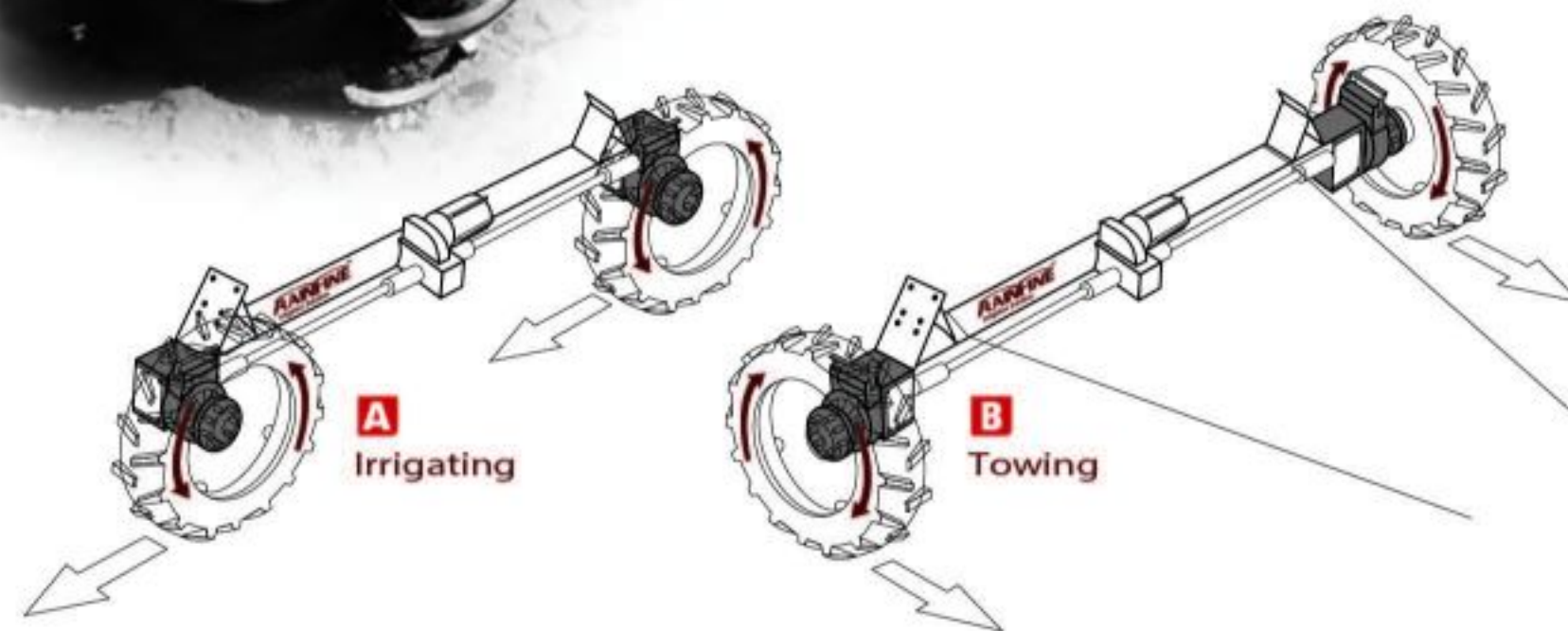
The specially designed steel structure can satisfy different lengths of the machines. The smallest machine is designed only one span plus one overhang (80m in length) which is for small land operation. The heavy duty design can be extended to more than 19 spans (800m). The angles, bolts and pivot anchors are strong enough to fight windstorm.





... **500**
Meters

500 meters towable center pivot is towing.



Towable

Three or four wheels are assembled on the center part of pivot. The system can be moved from one place to another by towing main pivot point tower with a tractor. Steel cables are used to secure structure and minimize possibility of damage. This system is called tow-able center pivot (mobile) system. The advantage of this design is to use one machine for two or three different lands. The investment is more economical.

Towing gearbox position



- a. Generator 10KW-15KW for electric power supply to pivot.
- b. End gun on/off control at any angle.
- c. End field barrier as part of auto stop reverse system is used for part circle pivots.





... **800**
Meters

The longest lateral move 800 meters two wings.



4 Wheels cart 1

Lateral cart 8"

4 Wheels cart 2

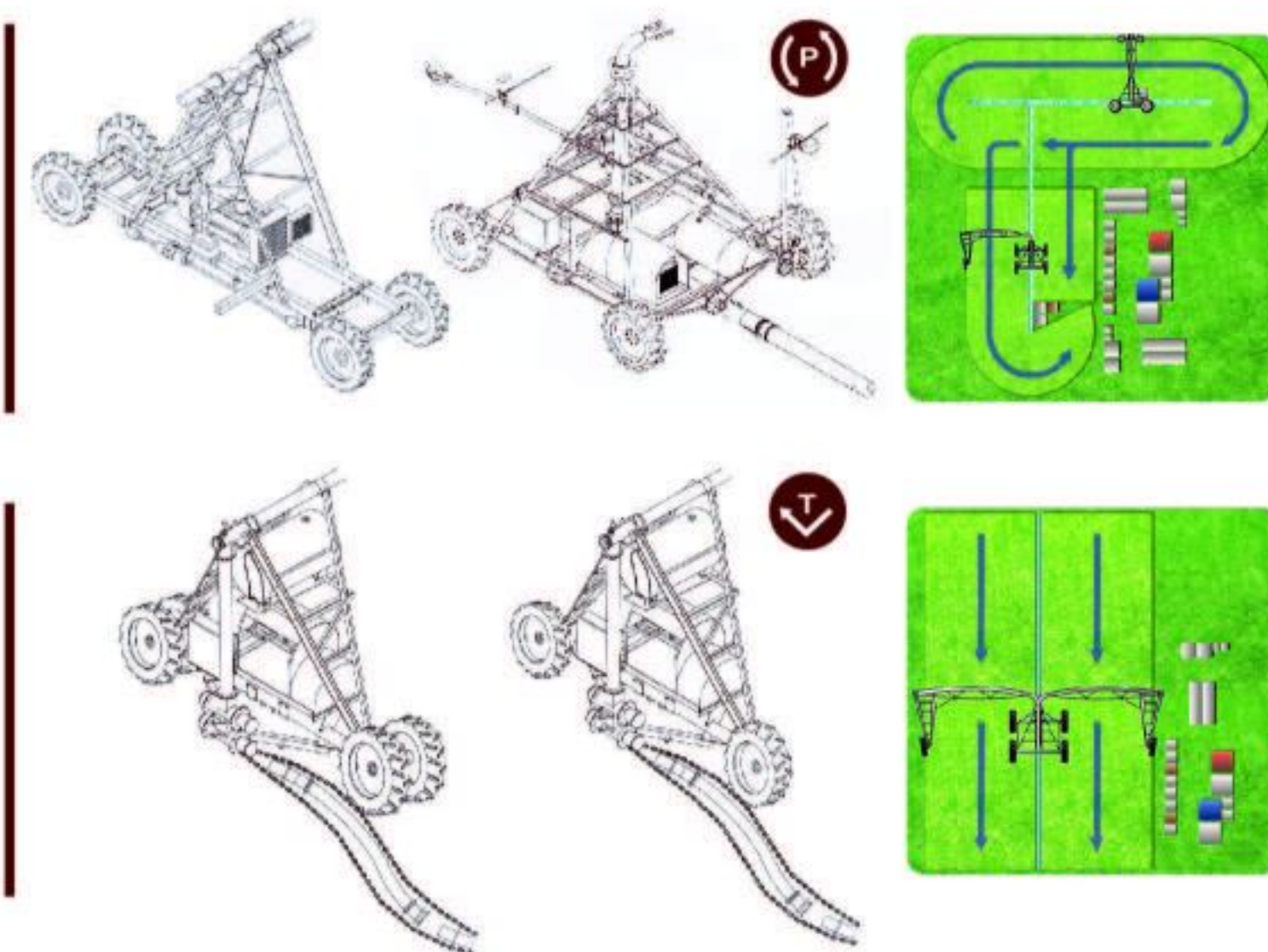
Lateral & Pivoting
cart 8"

Hose feed 1

4 Wheels 8"

Hose feed 2

Lateral & Towable
4 Wheels 8"



Ditch feed:
- Standard lateral
- Pivoting lateral (require temporary bridges)
Towable lateral 2 wheels maximum 250m

Hose feed lateral maximum 450m:
- Standard lateral
- Pivoting lateral

Lateral

All the machine works in linear movement by motor driven wheels to irrigate rectangle area, this system is called lateral move system or linear system. Unlike center pivot systems, where the area irrigated is dependent only on the length of the machine, lateral system area is determined by two factors: system length and travel distance.

This system is mainly used for grasses, grains, vegetables, cotton and sugar cane crops. the length can be from 1 span to 18 spans, normally more than 7 spans system is economical.

Determination of lateral move system capacity is critically important since it is necessary to properly design the following:

- Water source system: bore well capacity/pumps/kw.
- Water supply system: ditch feed / hose feed.
- Lateral move system: pipeline size/power/pump/generator system.



... **400**
Meters

Nitro Pivot- fastest pivot ever in
the world

- a. 1.5 hours /circle on 7 spans pivot
- b. constant move instead of start-stop move.
- c. Pivot can be used to apply herbicide, insecticide and fungicides
- d. No more airplane chemical spray needed
- e. No more ground chemical boom spray needed
- f. This is the greatest innovation- change the way of chemical spray in agriculture
- g. Much saving time and money, and much easier operation for farmers



Patented VFD tower boxes -drive pivot constant move instead of start-stop move



Center drive 3.5 hp/10:1- drive pivot wheels maximum speed 7.2 RPM .



30" spacing outlets design, much better uniformity liquid application.

Why Rainfine ?

For superb design quality

Truss design is the most important parts on pivot irrigation system. The structural mechanics are precisely calculated by computer and tested in tough road. It can stand 20 years long lasting work without any bending or breaking. The quality of the truss structure can not be judged by eyes of the people but by the longer life of working in field.



■ The high quality overhang cable is used in longer overhang. This design can help farmers to increase yield with less investment.



■ Rainfine 500 meters towable pivot in Kazakhstan is used in 3 different fields and is designed to tow every one or two weeks in 400mm furrow potato fields . After 4 years working, the structures and truss rods have no any distortion

Why Rainfine ?

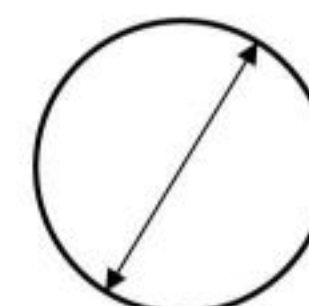
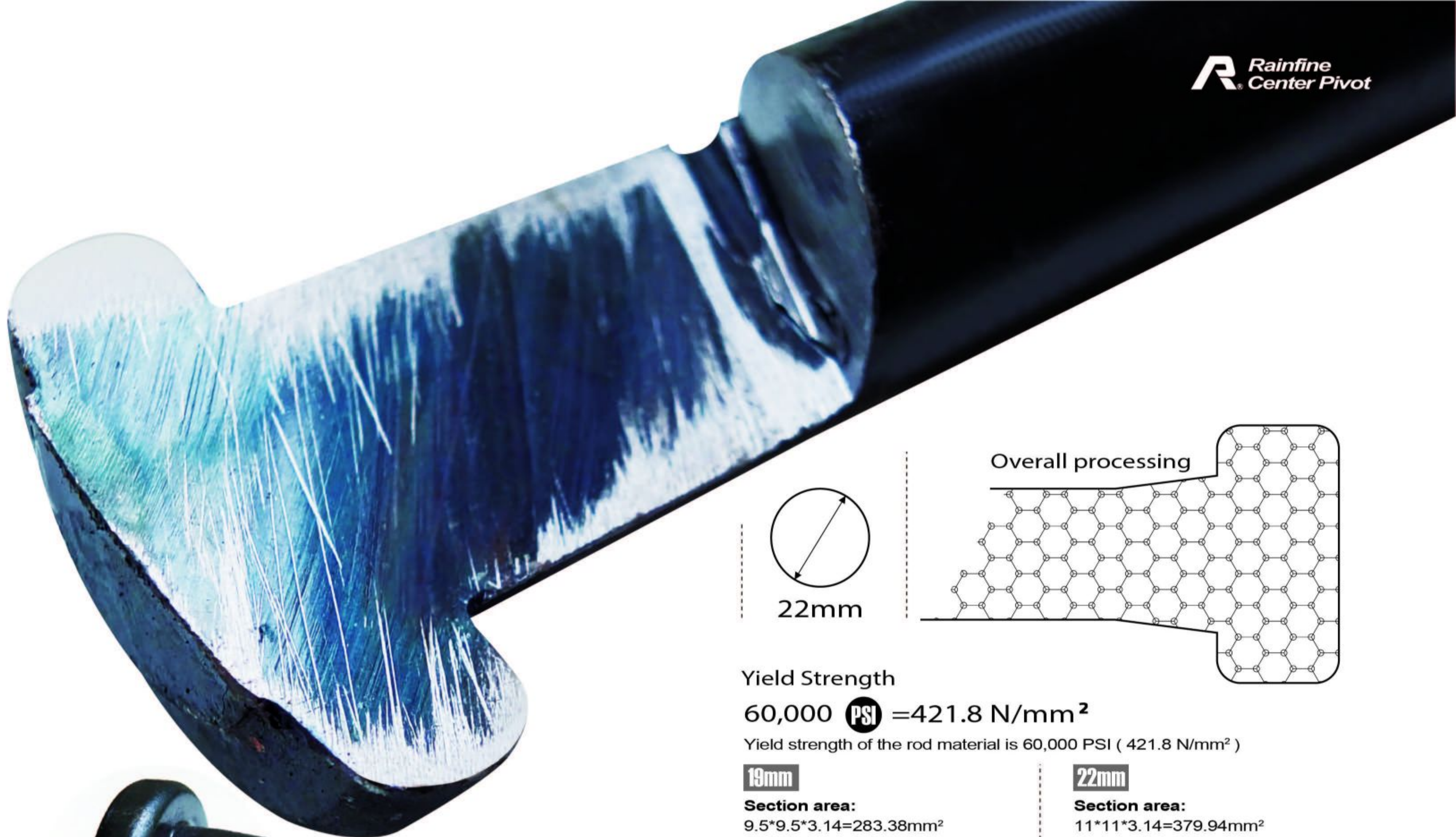
Amazing 22 mm truss rod

Truss rods are the key parts for holding the total weight of the pivot like the bridge sling. The way of processing is very important because if the processing is not correct, the truss rods would be broken when the pivot is working and cause the falling down of the complete machine.

We use high frequency electric heating system to heat the end of the steel rods and use head forging machine to forge both ends of the steel rods.

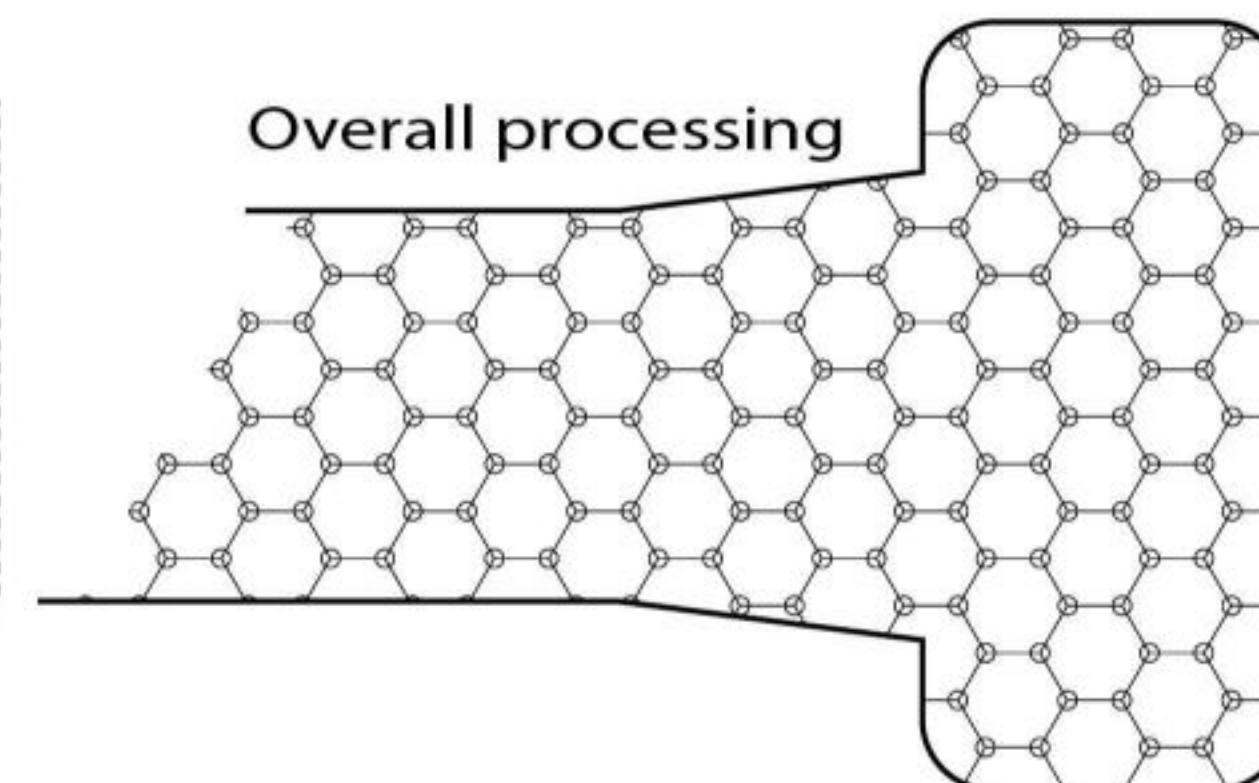
We use 22mm diameter rods instead of 19mm to make them stronger than other manufacturings.

You can find that the steel rod and the headed part are exactly the same Molecular. The quality standard is that this truss rod should be 60,000psi yield strength.



22mm

Overall processing



Yield Strength

60,000 **PSI** = 421.8 N/mm²

Yield strength of the rod material is 60,000 PSI (421.8 N/mm²)

19mm

Section area:

9.5*9.5*3.14=283.38mm²

Total strength:

421.8mm²*283.38mm²=119,529N

≈12 T

22mm

Section area:

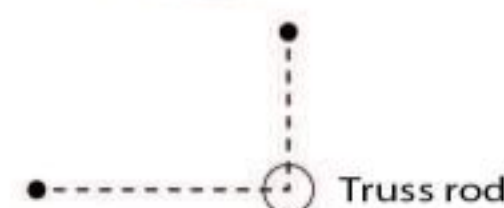
11*11*3.14=379.94mm²

Total strength:

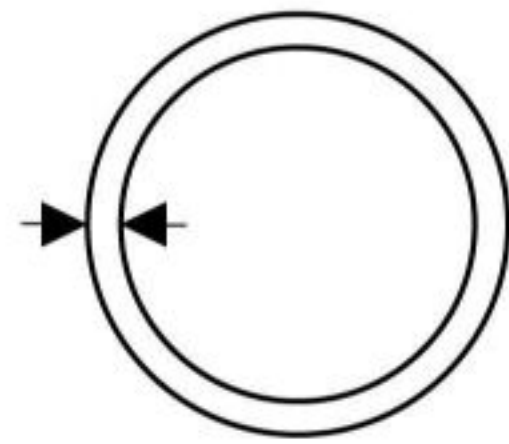
421.8mm²*379.94mm²=160,259N

≈16 T

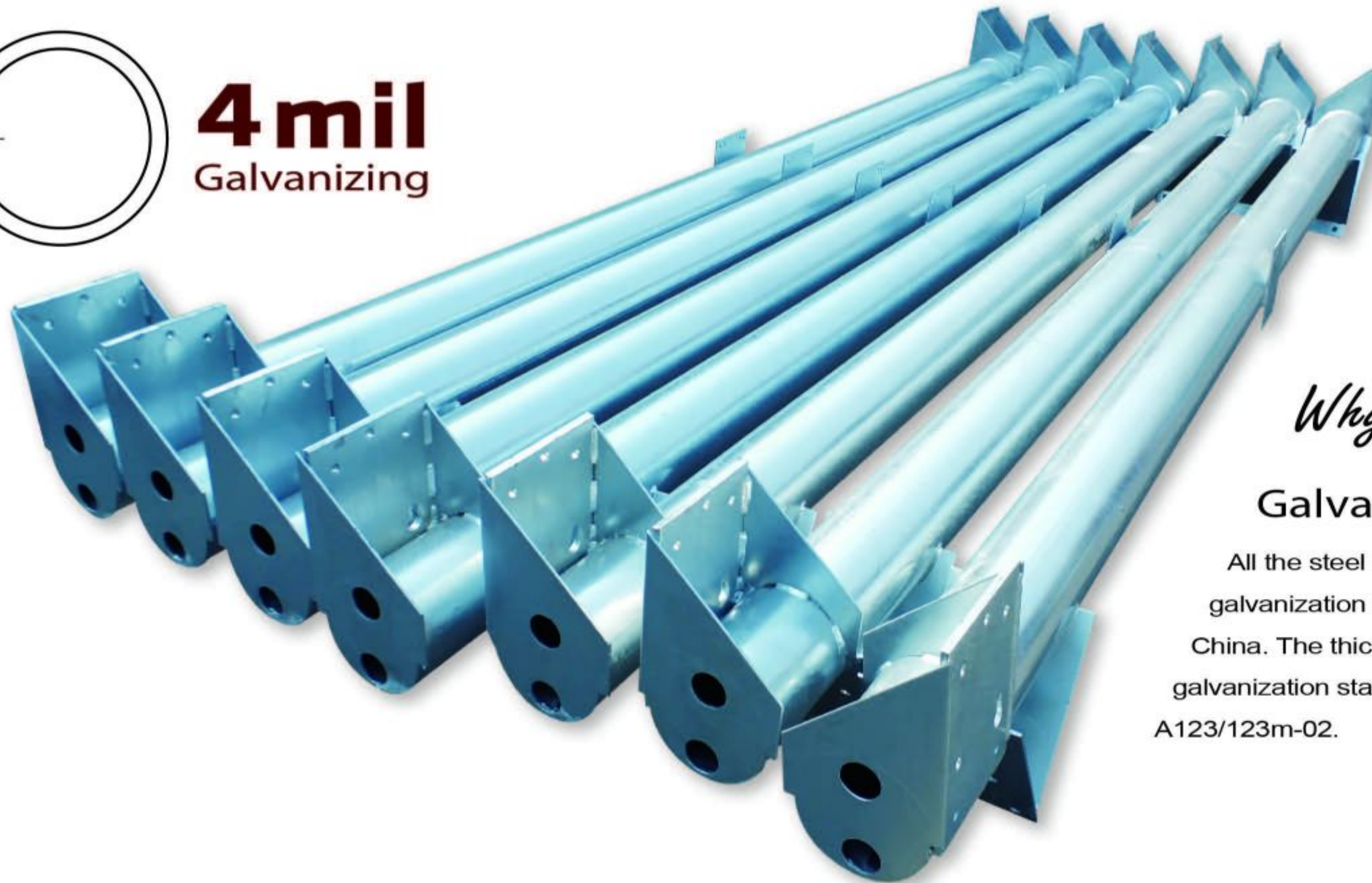
22mm truss rod can stand 16 tons strength which is 34% higher than 19mm ones.



Truss rod



4 mil
Galvanizing

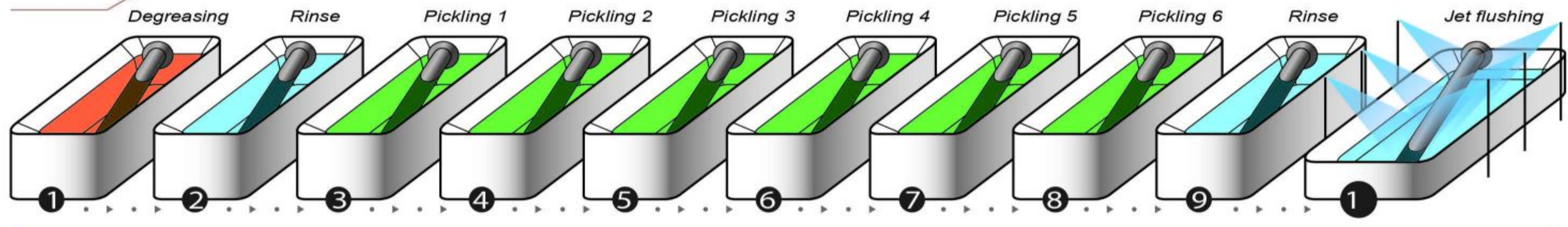


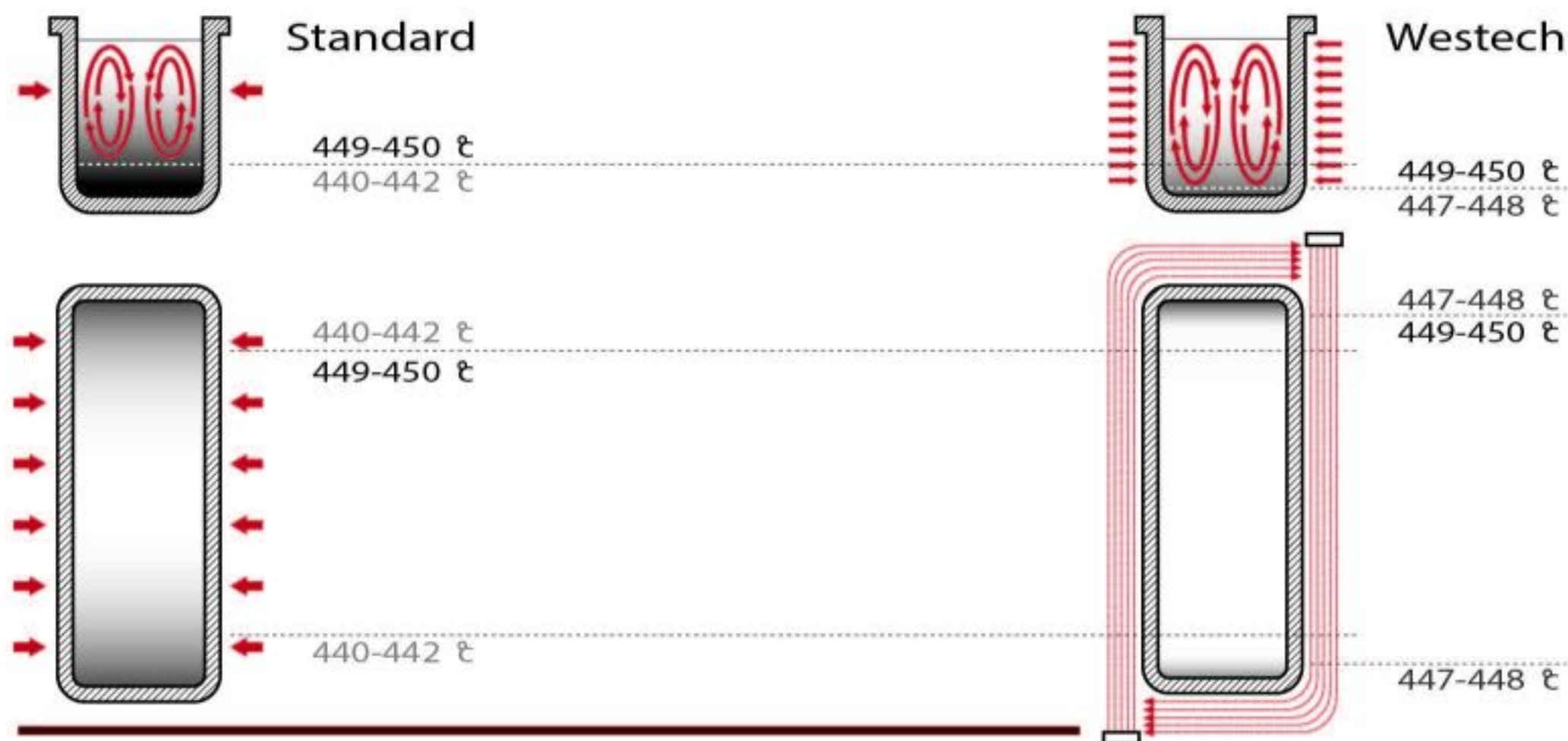
Why Rainfine ?

Galvanizing

All the steel parts are galvanized by hot dip galvanization in the top leading galvanizing plant in China. The thickness is 2.0 – 4.0 mil, which is the US galvanization standard of pivot manufacture ASTM A123/123m-02.

15 Steps | Galvanizing process to ensure quality products.





Galvanizing Kettle:

Inside Dimension: 13,500 long x 2,000 wide x 3,000 mm deep

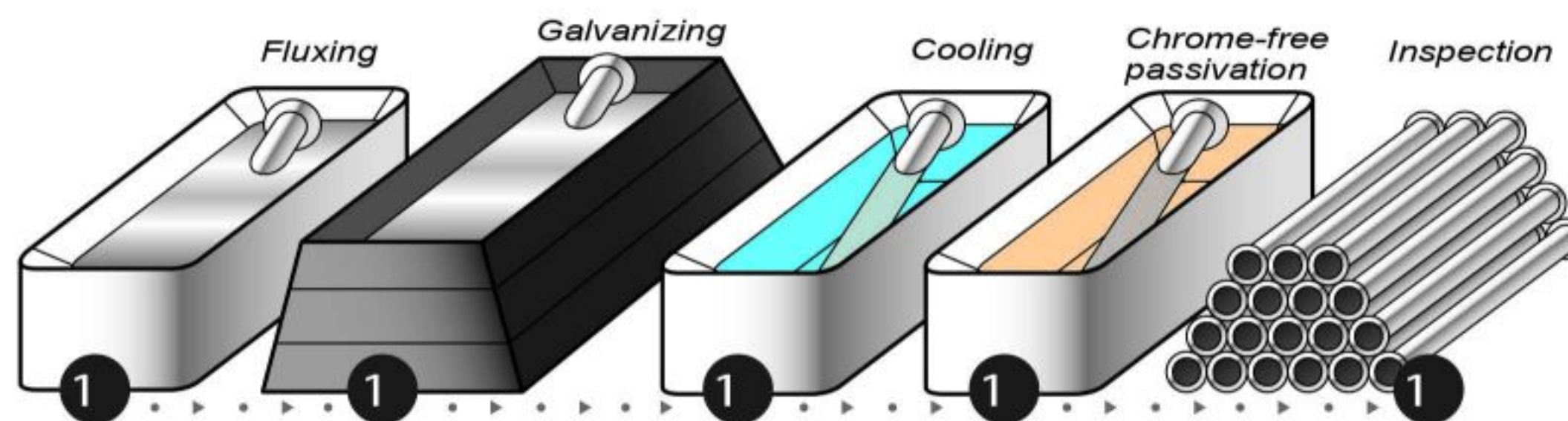
By W. Pilling of Riepe, Germany, the world's leading kettle manufacturer.

50mm wall thickness, European Special Grade Plate (see analysis below)

Typical Analysis: C, .08%; Mn, .5%; P, .02%; S, .02%; Si, traces only

EnviroTherm Pulse Fired High Velocity Galvanizing Furnace:

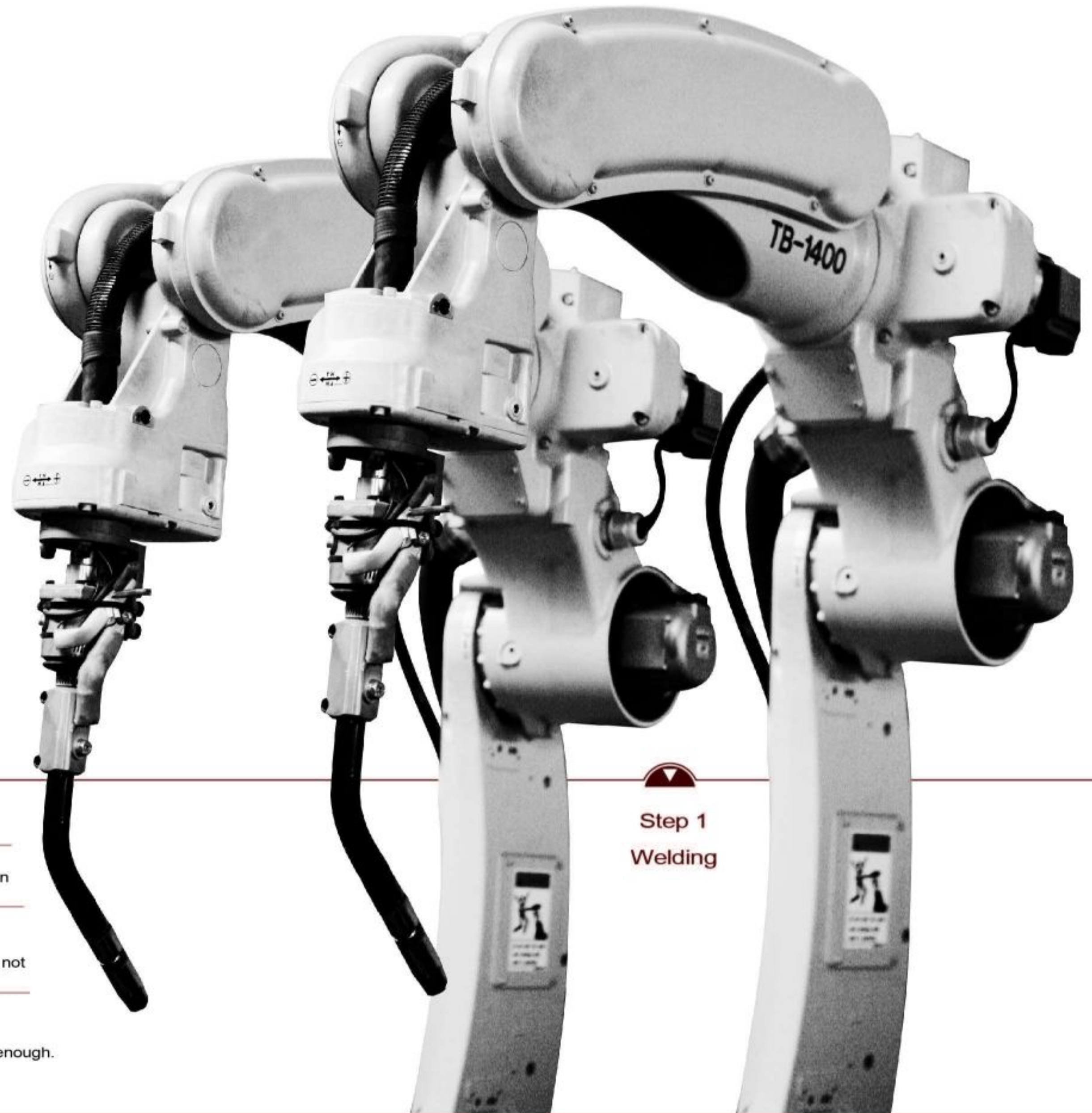
Rated 15.0 mt / hr., Relay Logic Control system, 4 burner high velocity pulse fired LNG system, 3 term PID temperature control system, 150 mm thickness high density ceramic fiber convoluted module insulation system, four raduis interior corners, kettle support system, dross protection system, auto melt out program, combustion air fan, sealed burner viewing ports, insulated exhaust duct to 4m, epoxy coating. Includes dimensional layout drawing of furnace pit with loadings.



Why Rainfine ?

Who is the welder

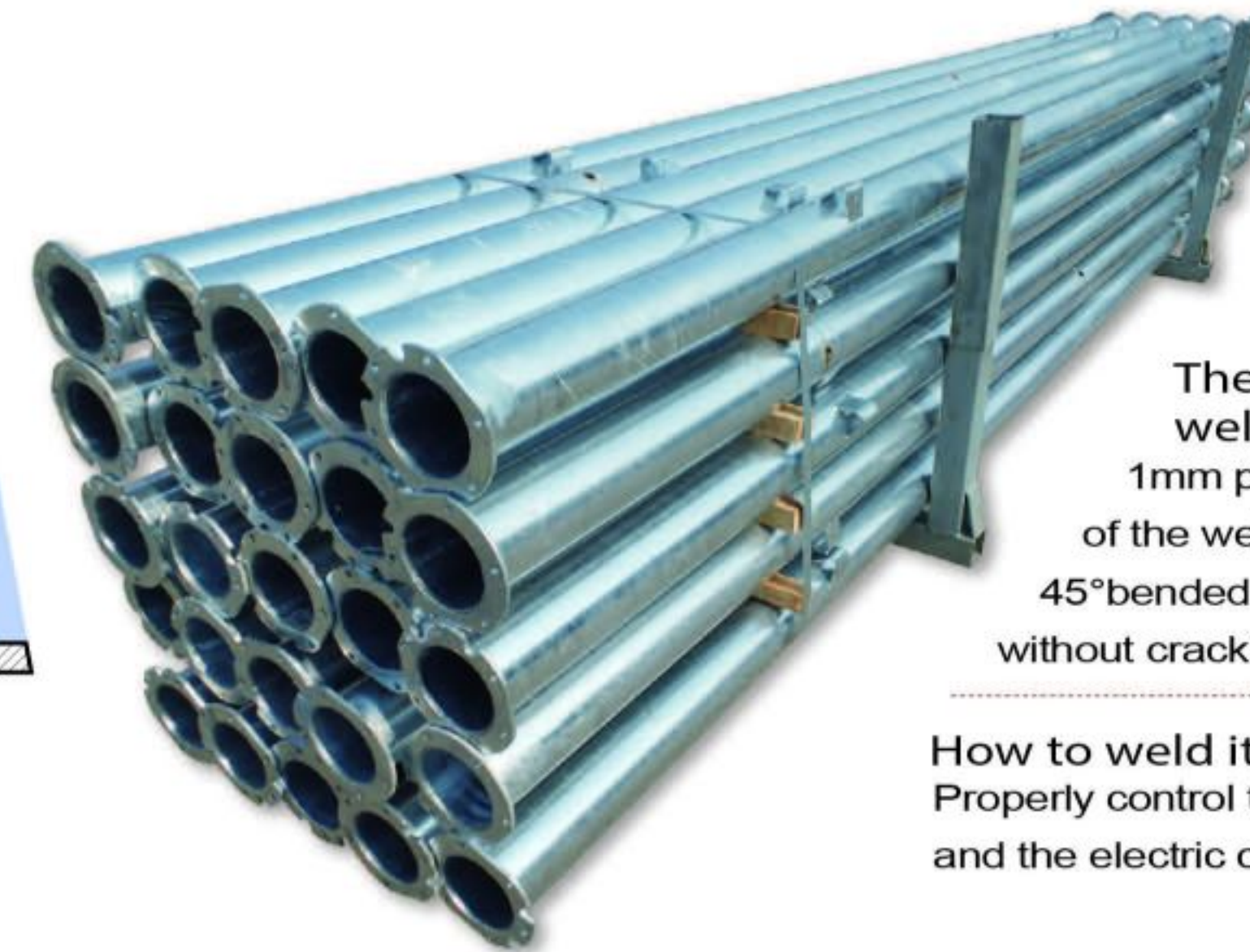
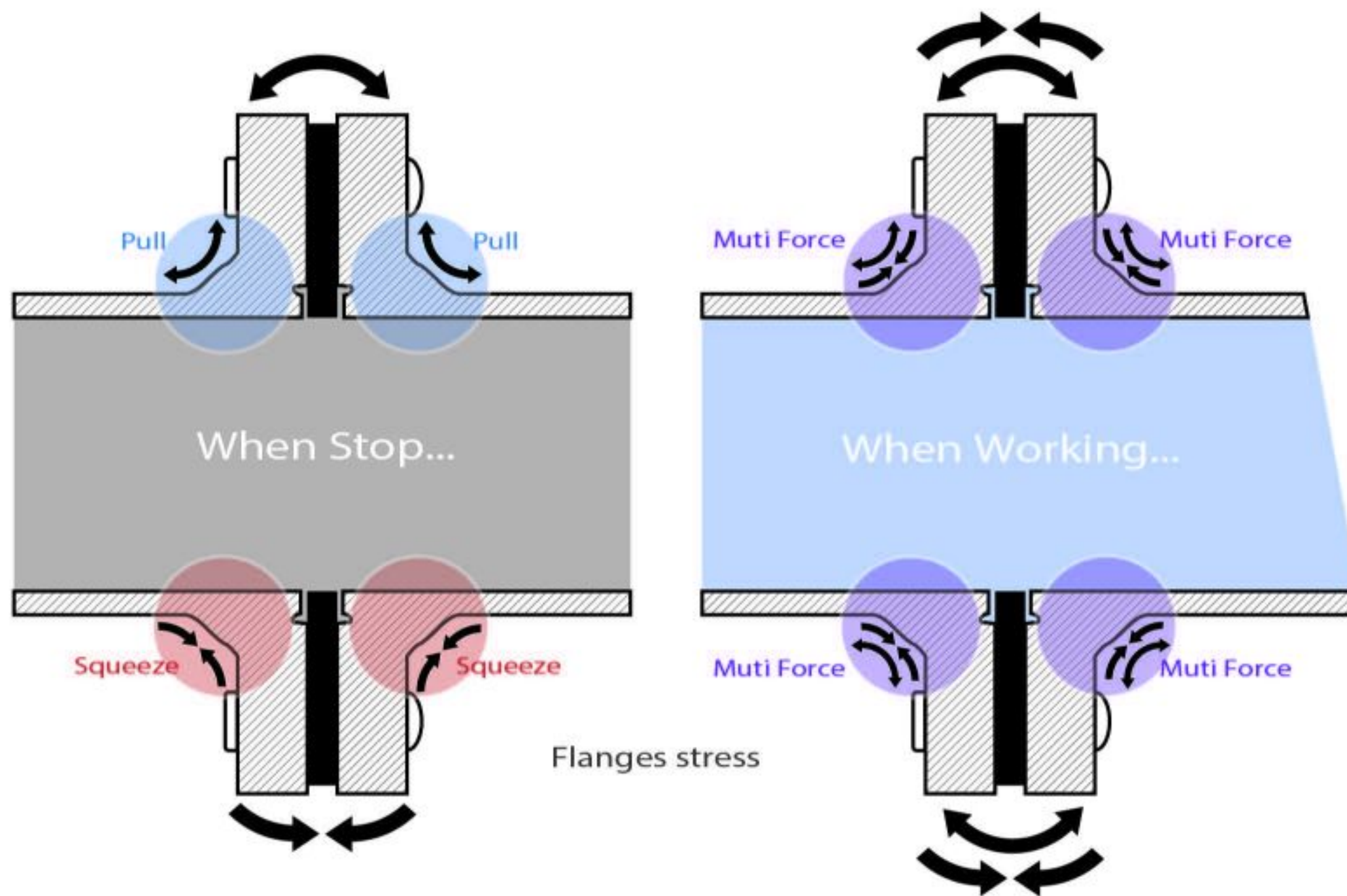
Pivot pipes are the most important parts of the machine. Rainfine uses 8 robots instead of workers to weld the flanges, bracket. This is the guarantee of the quality of all the pipes. On the process of manually welding, it is very difficult to control the welding speed and cause the quality problem as below.



Step 1
Welding

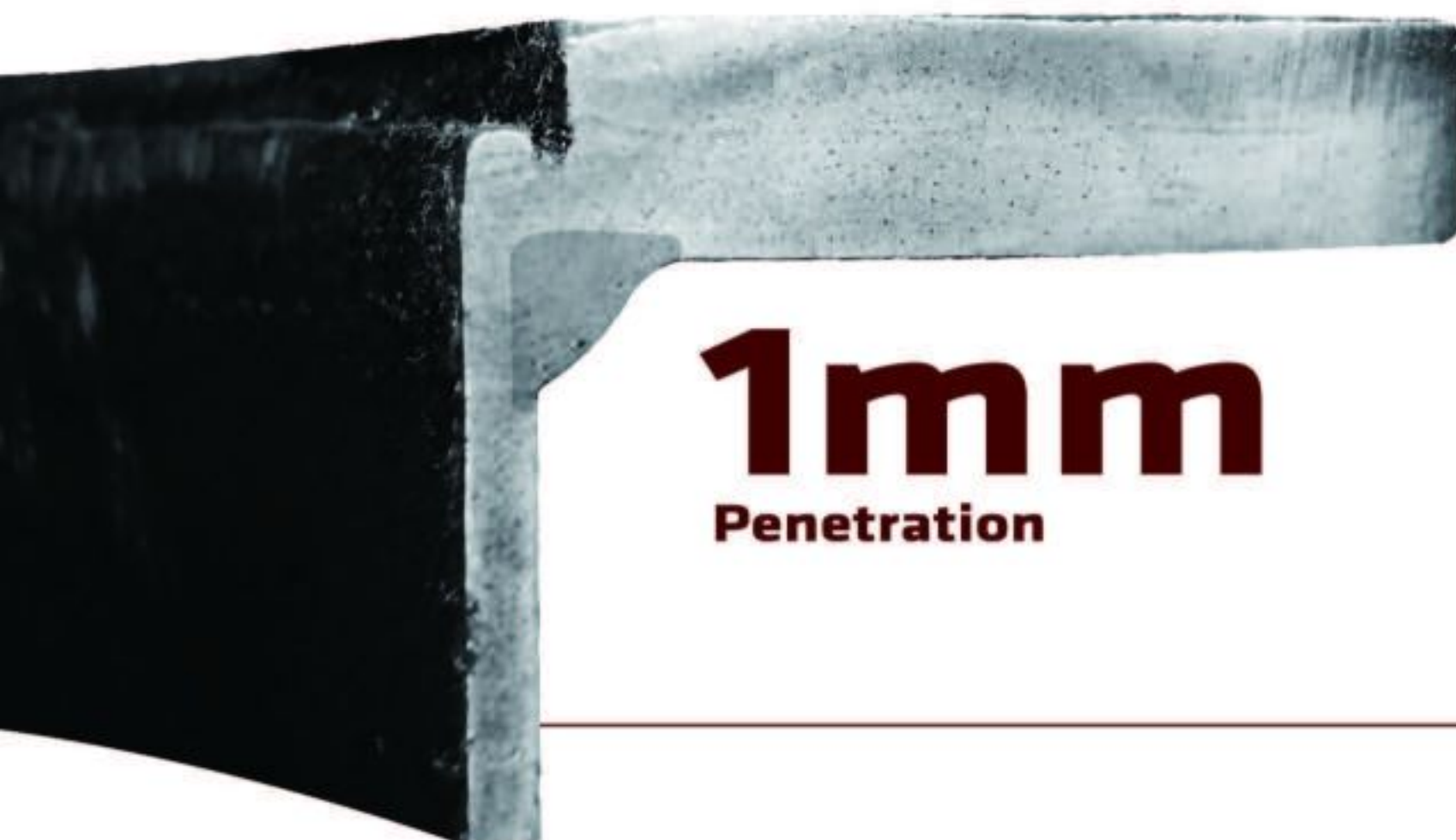
	Welding	Speed	Quality
1	Manually	Slow	Too much penetration even melt holes on the pipe
2	Manually	Fast	Too less penetration even not welded.
3	Robot	Proper	Good penetration, strong enough.

Welding



The best quality flanges welded on pipe
1mm penetration on the section
of the welding part.
45°bended hammer impact test
without cracking.

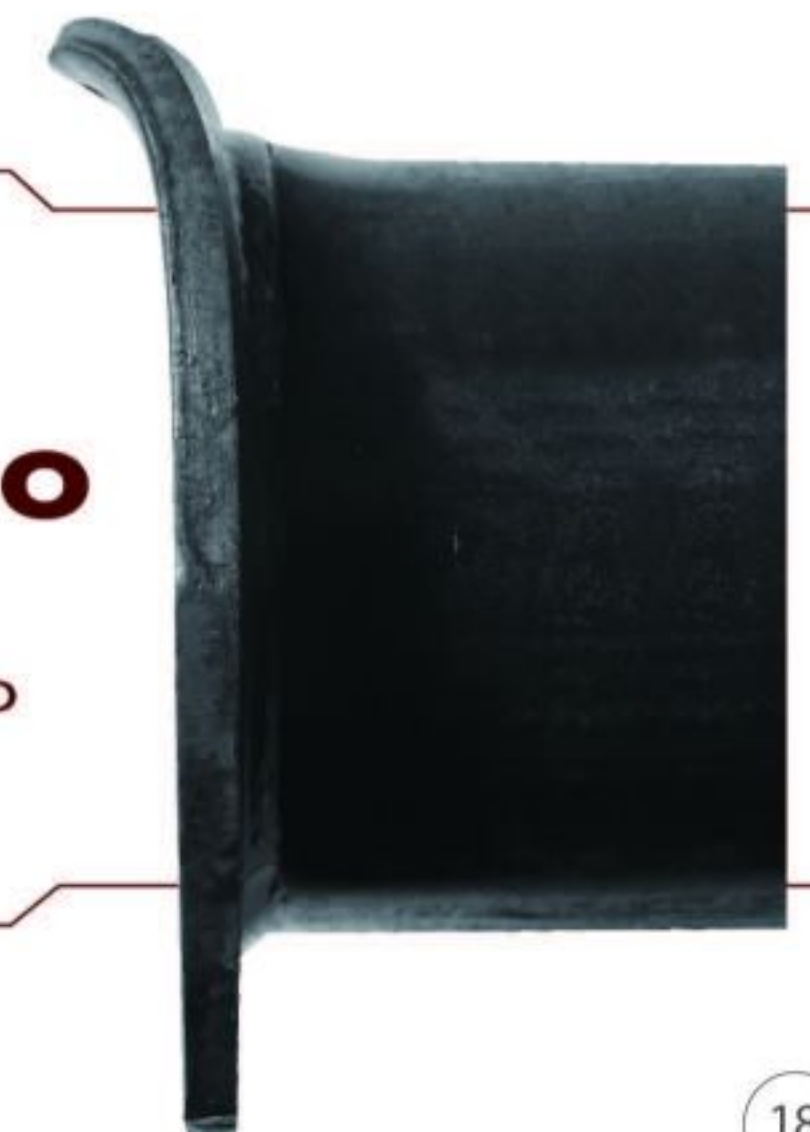
How to weld it
Properly control the speed of pipe rotation
and the electric current of the welding.



Step 2
Testing



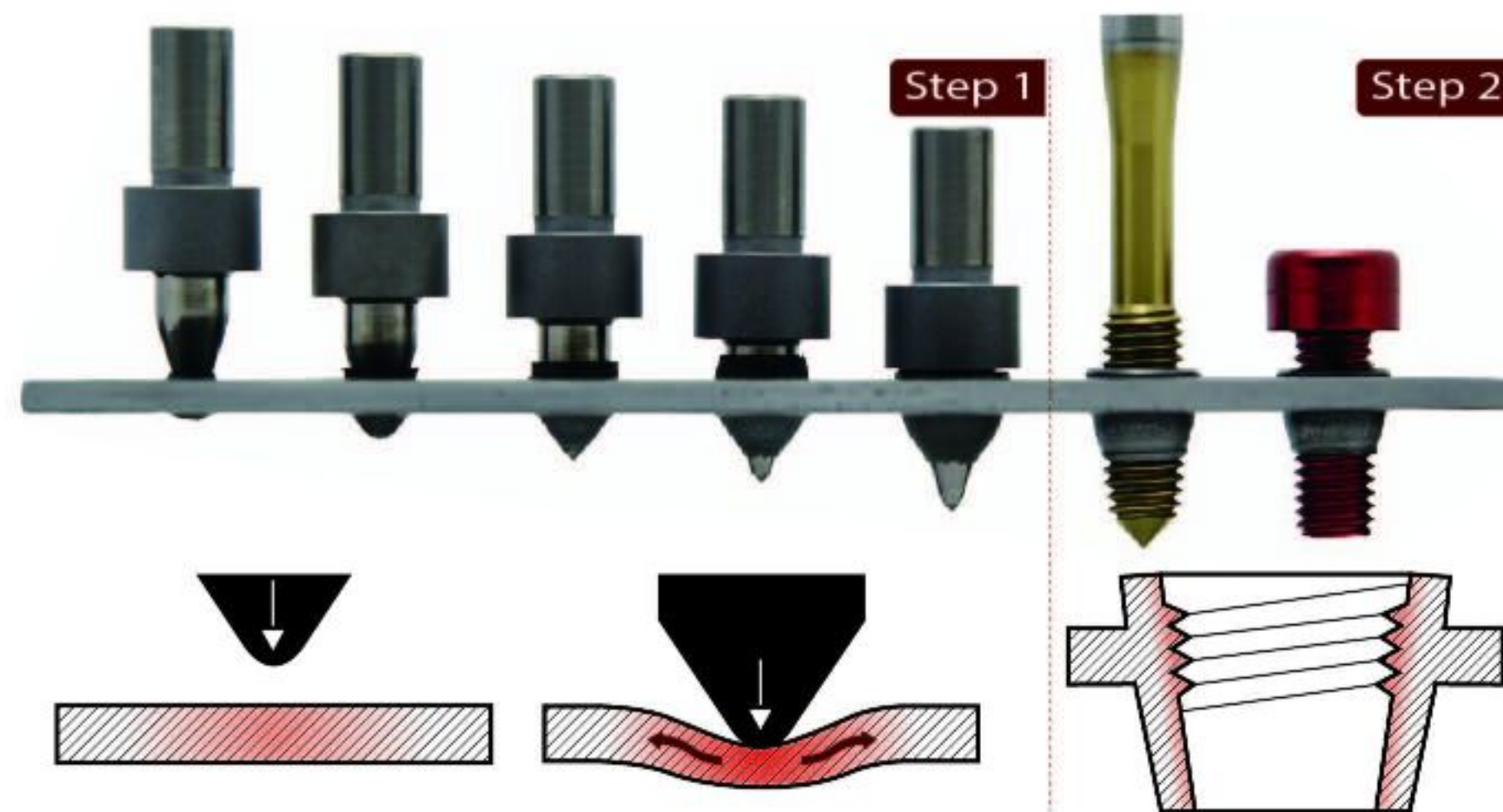
Step 3
Testing



Why Rainfine ?

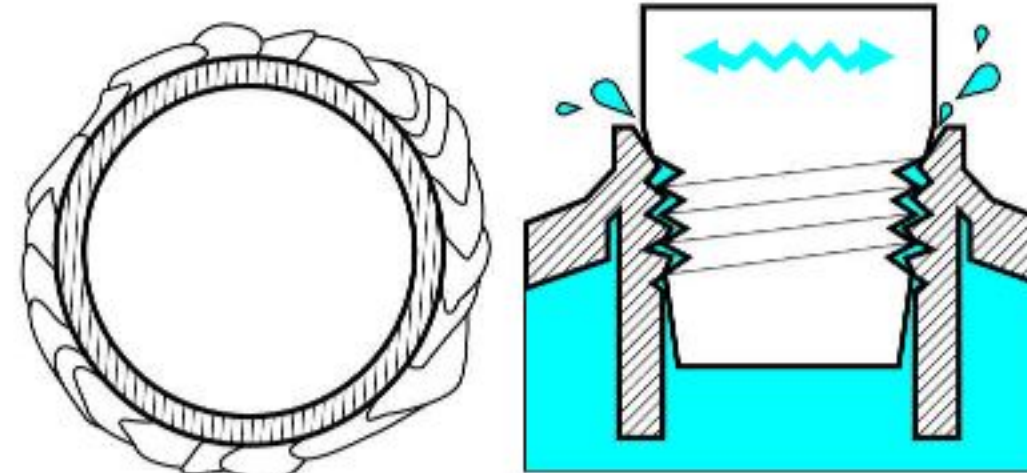
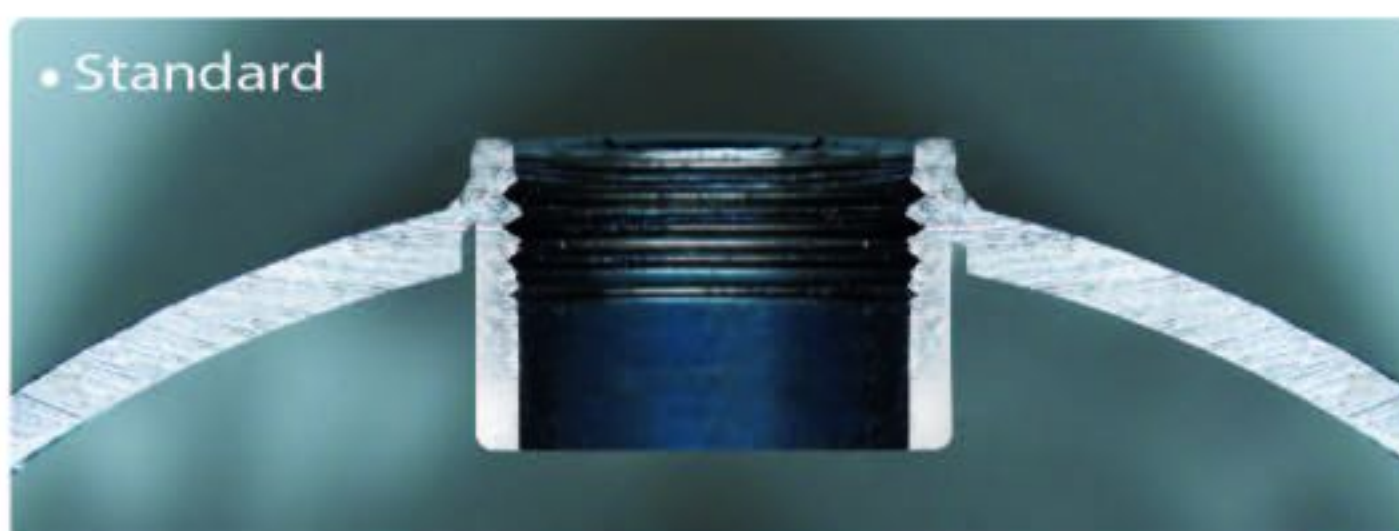
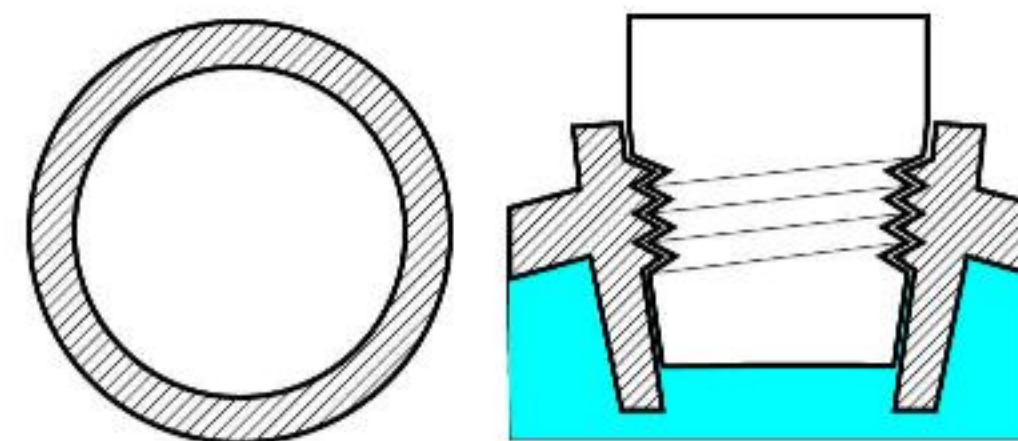
Why formdrill

The Formdrill is a thermal drilling and bush-forming tool that attaches to the chuck of any high-powered drill-press. Rotating the Formdrill at high speed under high axial load (the drill-bit being strongly pushed towards the work piece) generates frictional heat.



1. The temperature of the Formdrill rapidly climbs to around 650-750 °C, while the focal area of metal reaches around 600 °C. This heat softens a small section of the metal's structure and allows the formdrill to penetrate the work piece. There is absolutely no cutting involved during the creation of the hole. Unlike a conventional drill, the strength of the work piece is not compromised by the removal of material. Instead, the heated material Forms away from its original position to form a 360° bush around the periphery of the hole. During initial stages of the Formdrill process, the heated material rises against the tool's leading taper but once the surface is completely penetrated, the bulk of the displaced material forms to the underside of the hole. This underside bush usually projects downwards by three times the thickness of the material, while the raised collar sits only slightly above the surface.

2. Once a bushed hole has been formed in a workpiece, it's quite likely that you'll want to tap a thread into it.



Thread feature :

This can be done using conventional cutting taps or - preferably - with a cold-form Formtap

Again, this process does not involve removal of material. Formtapping results in maximum thread wall strength. Other advantages include quick tapping speed, reduced chance of pitch errors and no straying material.

This is the best way to be sure of the quality of outlet holes on millions of pipes.

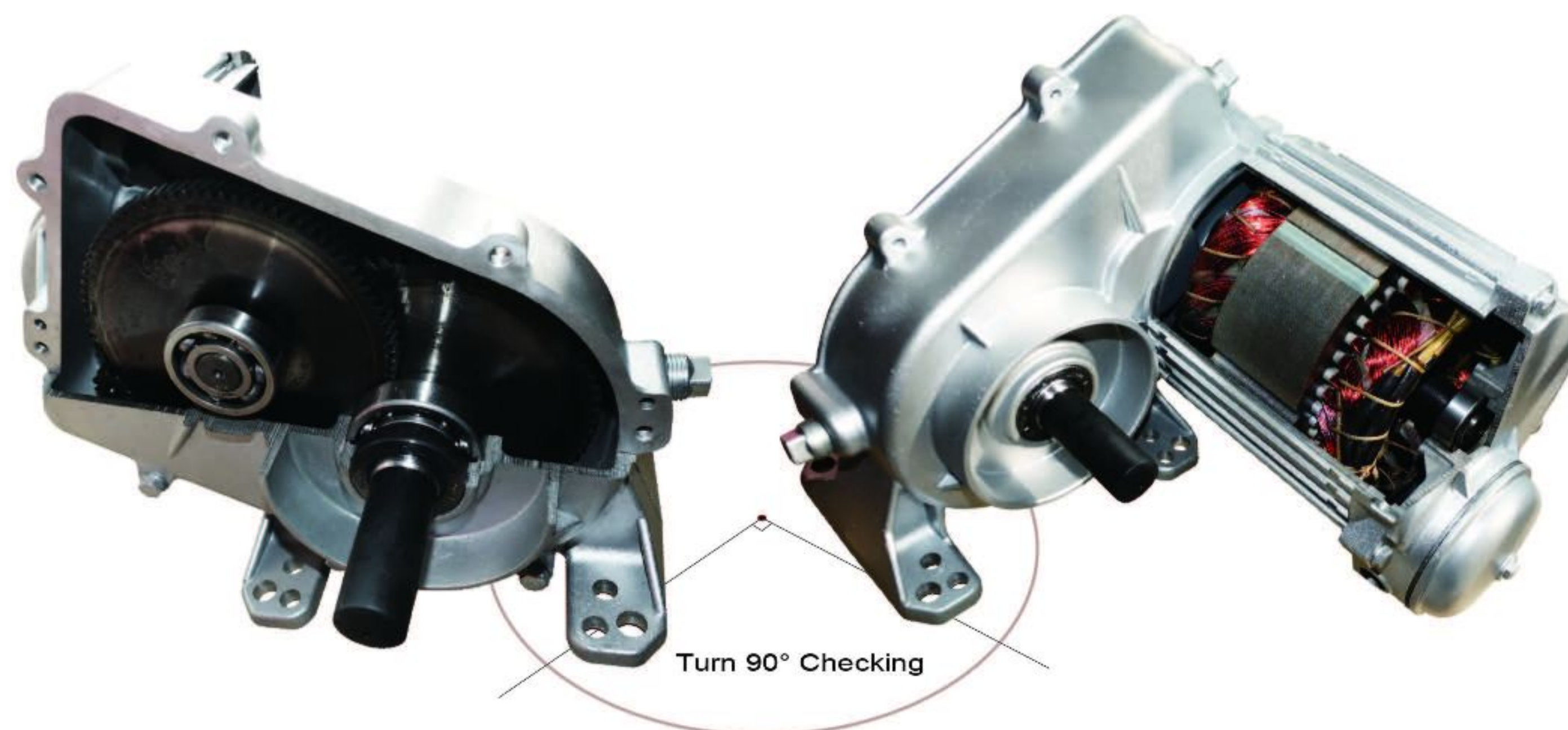


Why Rainfine ?

Heavy duty gearbox

- The worm consists of high strength forged steel with a Brinell hardness of 210 while the worm gear is manufactured from ductile cast iron with a relatively wide variation of hardness. This is totally different from other manufacturers who make it by grey pig iron.
- The worm and gear pressure angle have been designed at 4-1/2 degrees. This angle was selected based upon review of extensive engineering information and has been borne out by extensive testing and proven field result. The 4-1/2 degree pressure angle exceeds the necessary strength requirement while providing a greater efficiency than would be possible with large angle.
- The output shaft is a full 2-1/4" diameter shaft. Although other gearbox may use a larger shaft, the actual strength is determined by the load applied and physical properties of the shaft material. The gearbox overhung load point is relatively small at 1-1/2" from the bearing to the wheel mounting flange. The shaft material is a high-strength, forged steel.
- The worm end caps made from cast iron held by 4 bolts to reduce the possibility of working loose in the field – unlike system using a threaded nut design.
- Ratio: 50:1

Type	Tooth profile	Feature	Region	Efficiency
 a. Standard	Small meshing angle	Less wear strength	30~90days/Year In Russia	40~45%
 b. Heavyduty	Big meshing angle	More wear strength	300days/Year In Africa	55%



Why Rainfine ?
High quality motor

Center motor drive speeds for 50Hz/380V

Motor	Drive speed in 50 Hz (RPM/50Hz)	RATIO	Wheel speed (RPM)	Tire size	Tire perimeter	Speed at 100% timer
a.	35 RPM	40:1	0.7	11.2x38	4.42m	185m/h
				14.9x24	3.60m	151m/h
				16.9x 24	3.81m	160m/h
b.	47 RPM	40:1	0.74	11.2x38	4.42m	249m/h
				14.9x24	3.60m	203m/h
				16.9x 24	3.81m	214m/h
c.	56 RPM	25:1	1.12	14.9x24	3.60m	241m/h
				16.9x 24	3.81m	256m/h

Center motor drive speeds for 60Hz/480V

Motor	Drive speed in 60 Hz (RPM/60Hz)	RATIO	Wheel speed (RPM)	Tire size	Tire perimeter	Speed at 100% timer
a.	43 RPM	40:1	0.86	11.2x38	4.42m	228m/h
				14.9x24	3.60m	186m/h
				16.9x 24	3.81m	196m/h
b.	57 RPM	40:1	1.14	11.2x38	4.42m	302m/h
				14.9x24	3.60m	246m/h
				16.9x 24	3.81m	260m/h
c.	68 RPM	25:1	1.36	14.9x24	3.60m	293m/h
				16.9x 24	3.81m	310m/h

Why Rainfine ?

What is RNPT

Never flat

The rubber segment design eliminates flat tires cause by rot, puncture, or other air leakage.

Safe

Prevents any possible overwatering cause by flats.

Save time & Money

Reduce down time that leads to irrigation deficits which are particularly costly during the peak season.

Easy replacement

The damaged segment can be replaced easily by putting a new one on it.



Directional (D)

WHAT IS RNPT (Rubber Non-Pneumatic Tire)

Segments are made by high quality rubber.
Highest UV production material added.
10"x 38" standard galvanized rim.
Universal exchangeable rim to all brands.
Self-Cleaning tread pattern.
Wider tread for less intensity of pressure and better floatation.
Tread design offers great traction without being too aggressive.
Equivalent with the size of 14.9 x 24 pneumatic tires



Non-directional(ND)

Standard Non-pneumatic tire

Independent 16 segments for easy replacement
Configurable segments offer Directional (D) or Non-directional(ND)

Wt/tire: (KG)	125
Qty/Pallet (Pcs)	4
Size/Pallet (mm)	1,100 x1,100,1,300
Weight/Pallet (KG)	534
Qty/40'HC	37 Pallets(148 tires)
Wt /40'HC(KG)	19,758

RAINFINE[®]
Irrigation Solution.



Main panel

- Forward and Reverse
- Wet and Dry
- Booster Pump & End Gun On/Off
- Auto stop/Reverse option
- Power 480v/380v option
- Lightning Arrestor
- Low water pressure shut off
- Safety circuit status
- Emergency stop



Std. Collector Ring



Standard tower box



Next - last tower box



Last tower box

Senninger®



Regulator



The function of a pressure regulator in center pivot sprinkler design is to fix a varying inlet pressure to a set outlet pressure regardless of changes in the system pressure due to hydraulic condition, elevation changes, pump scenario, etc. It can uniform depth of water application and control sprinkler performance (droplet size and throw distance).



LDN



Minimized losses to wind drift, evaporation and runoff;
Multiple deflector pad design;
Rugged design for traveling through tall crops;
Low pressure – 6 to 15 psi;
Chemigation Pads produce an upward spray under the crop canopy;
Bubbler Pad applies water in a gentle, aerated pattern ideal for direct-to-furrow irrigation;



Super Spray



Wide variety of color-coded deflector pads to customize distribution pattern;
Full 360o spray pattern;
Low-pressure operation: 6-25 psi;
Chemigation pads and hose barb adapter available.



i-Wobs



Unique off-center rotary action, outstanding uniformity;
Gentle, rain-like application;
Excellent distance of throw;
Low pressure operation from 10 to 20 psi, can mean big energy savings over the course of a year.



Xi-Wob



Large area of coverage
Ultra low pressure
Easy clean, easy change nozzle
Droplet size needed for type of soil.
Uniformity affects
Application intensity
Excellent distance of throw

Nelson®



Regulator 

The function of a pressure regulator in center pivot sprinkler design is to fix a varying inlet pressure to a set outlet pressure regardless of changes in the system pressure due to hydraulic condition, elevation changes, pump scenario, etc. It can uniform depth of water application and control sprinkler performance (droplet size and throw distance).



D3000 

A fixed-spray sprinkler which produces a variety of patterns dependent upon the specific spray plate; Flip-over dual spray can allow easy conversion of the spray pattern; Choose spray plate options to germinate, irrigate, chemigate; Optional hose drag adapter for Low Energy Precision Application – LEPA; Part circle available.



O3000 

Outstanding uniformity and optimal droplets at low operating pressures; racket unassembled, eliminate debris hang-up and water-pattern misting common to conventional sprinklers; Long wear-life, reliable operation and durability; Excellent water application, 10-20 PSI operating pressure; Wind resistant, maximum water and energy conservation.



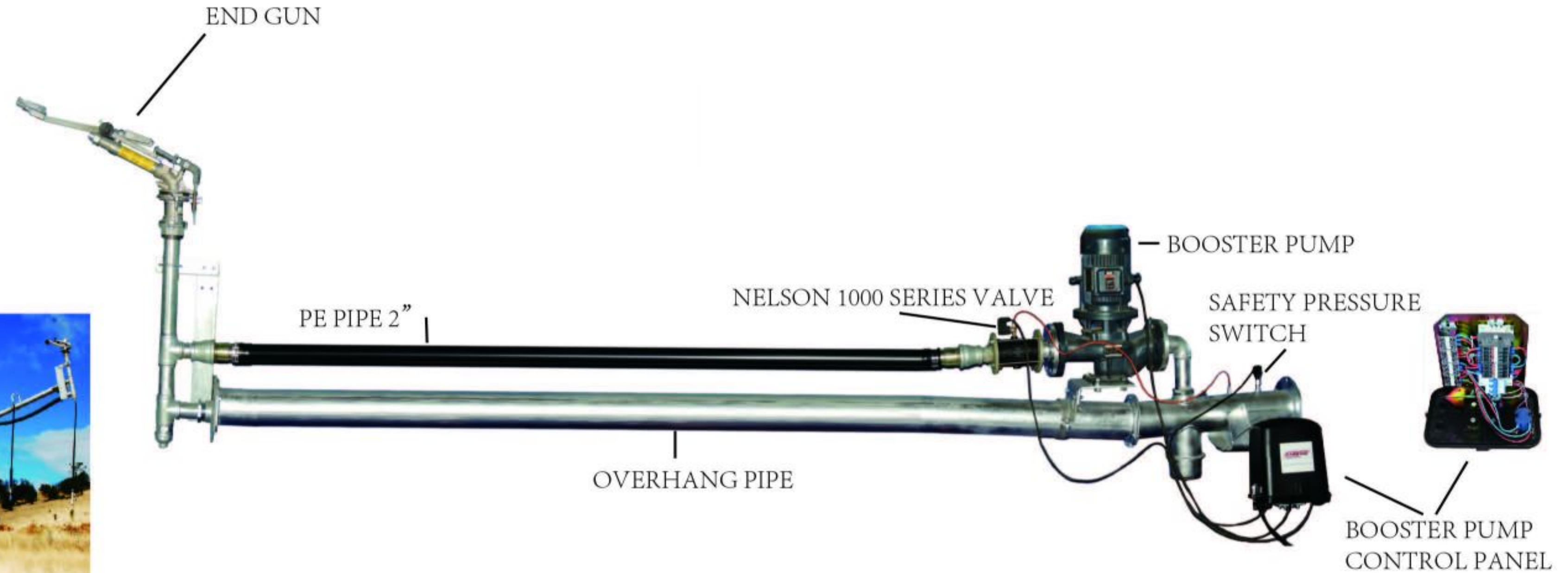
R3000 

Greater throw radius. The wide water pattern from rotating streams equates to lower average application rates, longer soak time and reduces runoff; High uniformity. Increase overlap from adjacent sprinklers improves uniformity; Reduce wind drift and evaporative loss; Part circle available.



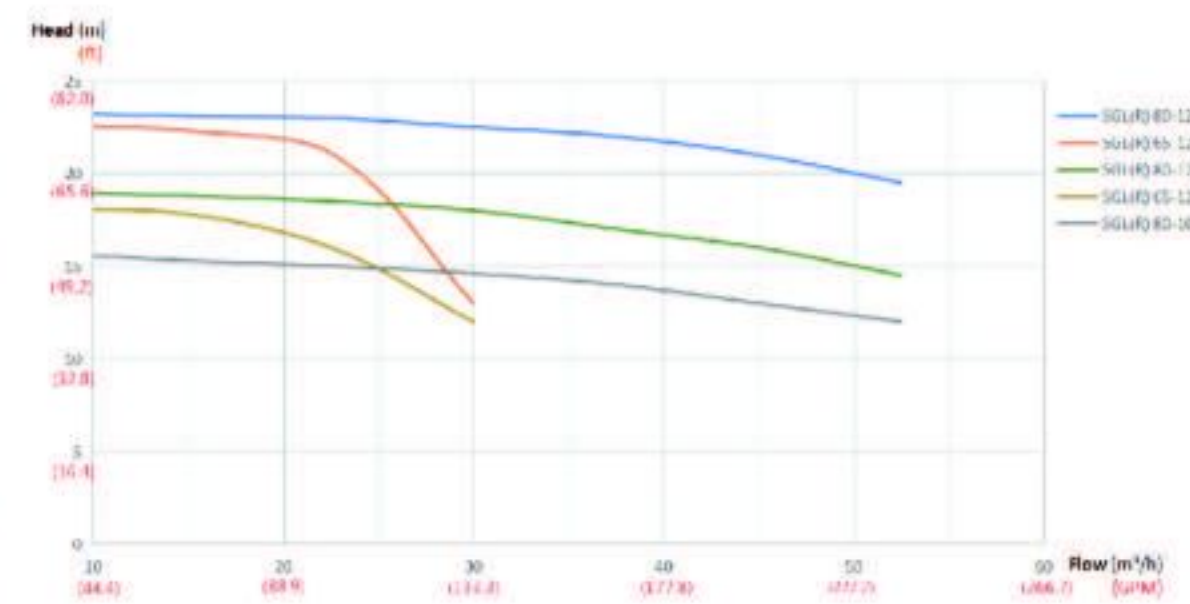
S3000 

Gentle rain at low pressure; Utilize a free-spinning actuator to produce a gentle, rain-like water pattern; Designed for more sensitive crops and soils; Superior uniformity with better overlap and lower application rates; Crop-guarded body for low energy, down in the crop application; Part circle available.



Serial	Flow		Head		Power		Wt (kg)
	(m ³ /h)	(GPM)	(m)	(Foot)	(KW)	(HP)	
65-125A	16	71.1	19	62.3	2.2	3.0	53
65-125	25	111.1	20	65.6	3.0	4.1	62
80-100	50	222.2	12.5	41.0	3.0	4.1	60
80-125A	40	177.8	19	62.3	4.0	5.4	72
80-125	50	222.2	20	65.6	5.5	7.5	92

BOOSTER PUMP OPTIONS



BOOSTER PUMP CURVE

End gun assembling-Low pressure cut off:

To avoid the booster pump motor being damaged by dry run, a safety pressure switch is used to cut off the power when water pressure is too low. It is normally happened when pivot start power but water is not coming from the pivot point, or water is cut off by some reasons but pivot is still working.

All ranges of water flow and pressure options:

Different size of booster pumps can be used on pivot from 3 spans to 12 spans (16 – 50m³/h).

Nelson 1000 series valve

1 psi friction loss only on 30m³/h which is the minimum friction loss compare to other valves.

Booster pump control panel

ABB contactors, overcurrent protection, low water pressure cut off.

End gun options:

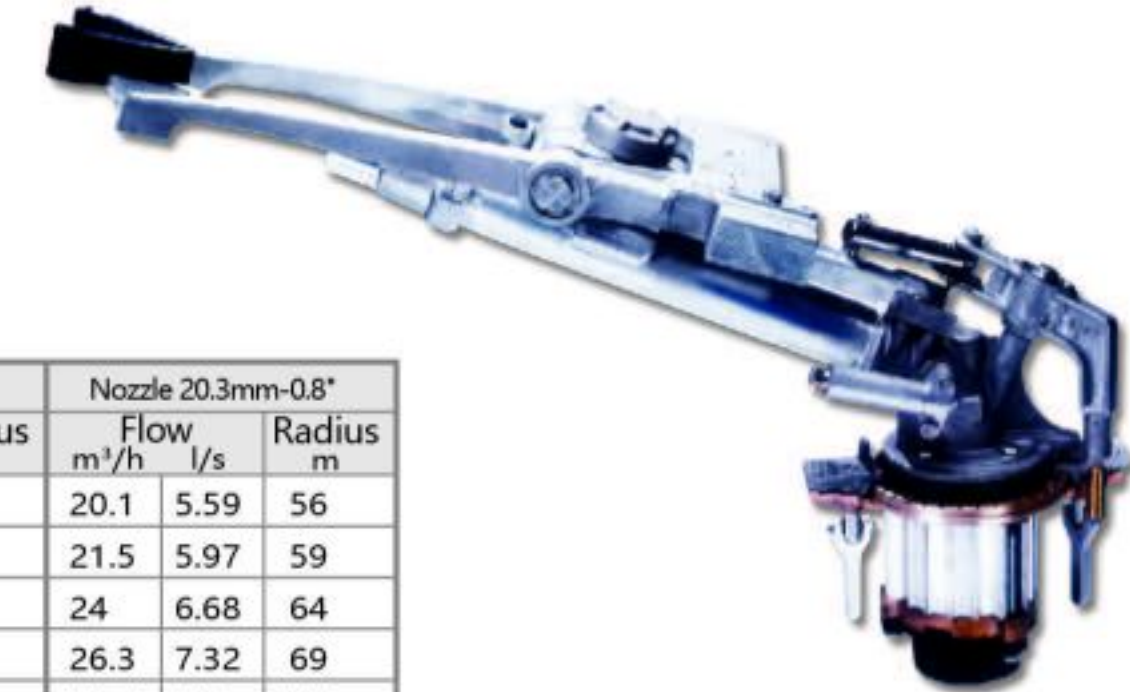
Nelson, Komet, Yuzuak, Sime, Xcad.

innovation in irrigation™

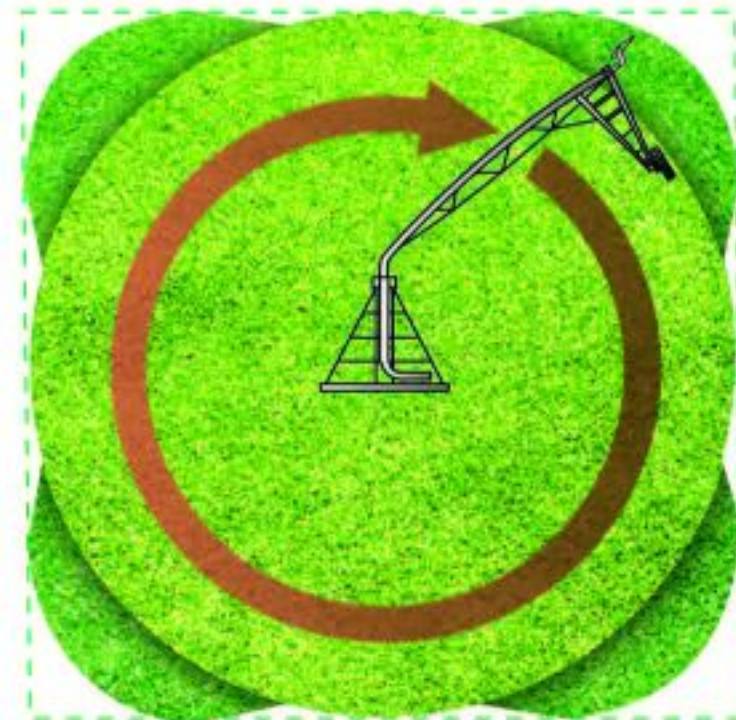
NELSON [Nelson-SR]

Pressure (Bar)	Nozzle 11.4mm-0.45"			Nozzle 12.7mm-0.5"			Nozzle 14.3mm-0.56"			Nozzle 15.2mm-0.6"			Nozzle 16.5mm-0.65"			Nozzle 17.8mm-0.7"			Nozzle 19.1mm-0.75"			Nozzle 20.3mm-0.8"		
	Flow m³/h	l/s	Radius m	Flow m³/h	l/s	Radius m	Flow m³/h	l/s	Radius m	Flow m³/h	l/s	Radius m	Flow m³/h	l/s	Radius m	Flow m³/h	l/s	Radius m	Flow m³/h	l/s	Radius m	Flow m³/h	l/s	Radius m
1.75							9.5	2.64	44	11.4	3.17	48	13.4	3.72	49	15.5	4.3	51	17.7	4.91	54	20.1	5.59	56
2				8.4	2.33	48	10.2	2.82	48	12.2	3.39	51	14.3	3.98	52	16.5	4.59	56	18.9	5.25	58	21.5	5.97	59
2.5	7.6	2.11	47	9.4	2.61	50	11.4	3.16	53	13.6	3.79	55	16	4.45	58	18.5	5.14	60	21.1	5.87	62	24	6.68	64
3	8.3	2.32	50	10.3	2.86	53	12.4	3.46	57	15.9	4.15	59	17.6	4.88	61	20.3	5.63	63	23.1	6.43	66	26.3	7.32	69
3.5	9	2.5	52	11.1	3.09	57	13.4	3.74	60	16	4.48	62	19	5.27	64	21.9	6.08	67	25	6.95	70	28.4	7.9	73
4	9.6	2.67	54	11.9	3.3	59	14.4	3.99	62	17.2	4.79	65	20.3	5.63	67	23.4	6.5	71	26.7	7.43	73	30.4	8.45	76
4.5	10.2	2.84	57	12.6	3.5	62	15.2	4.24	66	18.3	5.08	68	21.5	5.97	71	24.8	6.89	75	28.4	7.88	78	32.3	8.96	80
5	10.8	2.99	60	13.3	3.69	64	16.1	4.46	68	19.3	5.35	70	22.7	6.3	74	26.1	7.26	78	29.9	8.3	80	34	9.45	84
5.5	11.3	3.13	62	13.9	3.87	66	16.9	4.68	70	20.2	5.61	73	23.8	6.6	77	27.4	7.62	81	31.3	8.71	83	35.7	9.9	86
6	11.8	3.27	63	14.6	4.04	68	17.6	4.89	72	21.1	5.86	74	24.8	6.9	79	28.6	7.96	84	32.7	9.09	85	37.2	10.3	87

Taper bore nozzle, 24° Trajectory



komet [Twin 101/ULTRA]



■ Extra area covered by end gun.

■ Area covered by pivot.

Pressure (Bar)	Nozzle 12mm-0.47"			Nozzle 14mm-0.55"			Nozzle 16mm-0.63"			Nozzle 18mm-0.71"			Nozzle 20mm-0.79"			Nozzle 22mm-0.87"			Nozzle 24mm-0.94"		
	Flow m³/h	l/s	Radius m	Flow m³/h	l/s	Radius m	Flow m³/h	l/s	Radius m	Flow m³/h	l/s	Radius m	Flow m³/h	l/s	Radius m	Flow m³/h	l/s	Radius m	Flow m³/h	l/s	Radius m
2.0				10.6	2.96	26	13.9	3.86	27.9	17.6	4.89	29.7	21.7	6.04	31.5	26.3	7.3	33.1	31.3	8.69	34.7
2.5				11.9	3.31	28.3	15.5	4.32	30.4	19.7	5.47	32.4	24.3	6.75	34.3	29.4	8.17	36.1	35	9.72	37.8
3.0	9.6	2.66	27.9	13	3.62	30.3	17	4.73	32.6	21.6	5.99	34.7	25.6	7.39	36.7	32.2	8.95	38.7	38.3	10.65	40.5
3.5	10.4	2.87	29.5	14.1	3.91	32.1	18.4	5.11	34.5	23.3	6.47	36.8	28.7	7.99	38.9	34.8	9.66	41	41.4	11.5	43
4.0	11.1	3.07	31.1	15.1	4.18	33.8	19.7	5.46	36.3	24.9	6.91	38.7	30.7	8.54	41	37.2	10.33	43.1	44.3	12.29	45.2
4.5	11.7	3.26	32.5	16	4.44	35.3	20.9	5.8	38	26.4	7.33	40.5	32.6	9.05	42.8	39.4	10.96	45.1	46.9	13.04	47.3
5.0	12.4	3.44	33.8	16.8	4.68	36.8	22	6.11	39.5	27.8	7.73	42.1	34.4	9.54	44.6	41.6	11.55	46.9	49.5	13.74	49.2
5.5	13	3.6	35.1	17.7	4.91	38.1	23.1	6.41	41	29.2	8.11	43.7	36	10.01	46.2	43.6	12.11	48.7	51.9	14.42	51
6.0	13.6	3.76	36.3	18.4	5.12	39.4	24.1	6.69	42.4	30.5	8.47	45.1	37.6	10.46	47.8	45.5	12.65	50.3	54.2	15.06	52.7
6.5	14.1	3.92	37.4	19.2	5.33	40.6	25.1	6.96	43.6	31.7	8.81	46.5	39.2	10.88	49.3	47.4	13.17	51.9	56.4	15.67	54.4

Taper bore nozzle, 24° Trajectory

[Span size]

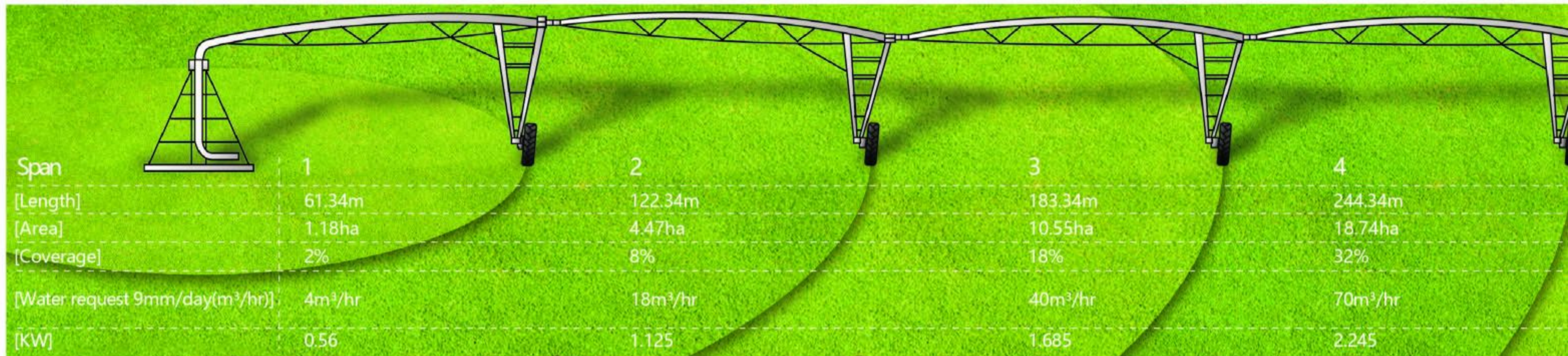
Pipe Size	Span Length	A	B	C	D	E
8"-203mm	135'-41.15m	12'10"-3.91m	136'1"-41.47m	9'7"-2.92m	14'7"-4.45m	135'2"-41.20m
8"-203mm	157'-47.85m	12'10"-3.91m	158'-48.16m	9'10"-3.00m	14'10"-4.52m	157'-47.85m
8"-203mm	179'-54.56m	12'10"-3.91m	180'2"-54.91m	9'6"-2.90m	14'10"-4.52m	178'11"-54.53m
6-5/8"-168mm	135'-41.15m	12'10"-3.91m	136'-34.57m	9'8"-2.95m	14'10"-4.52m	135'-41.15m
6-5/8"-168mm	157'-47.85m	12'10"-3.91m	158'1"-48.18m	9'11"-3.02m	15'2"-4.62m	157'1"-47.88m
6-5/8"-168mm	179'-54.56m	12'10"-3.91m	180'2"-54.91m	9'6"-2.90m	14'10"-4.52m	178'11"-54.53m
6-5/8"-168mm	201'-61.26m	12'10"-3.91m	201'3"-61.34m	10'1"-3.07m	15'1"-4.60m	200'2"-61.01m

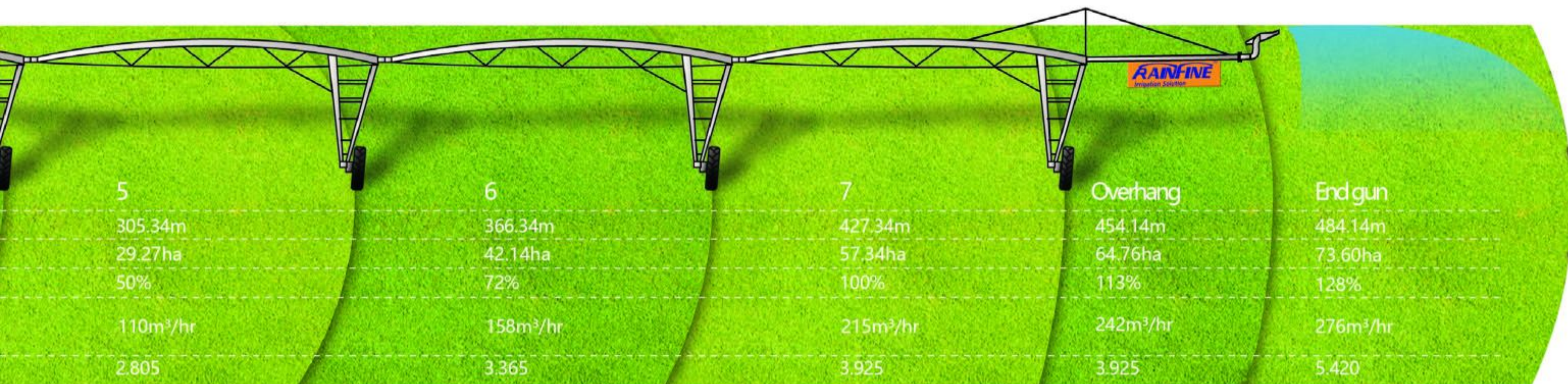
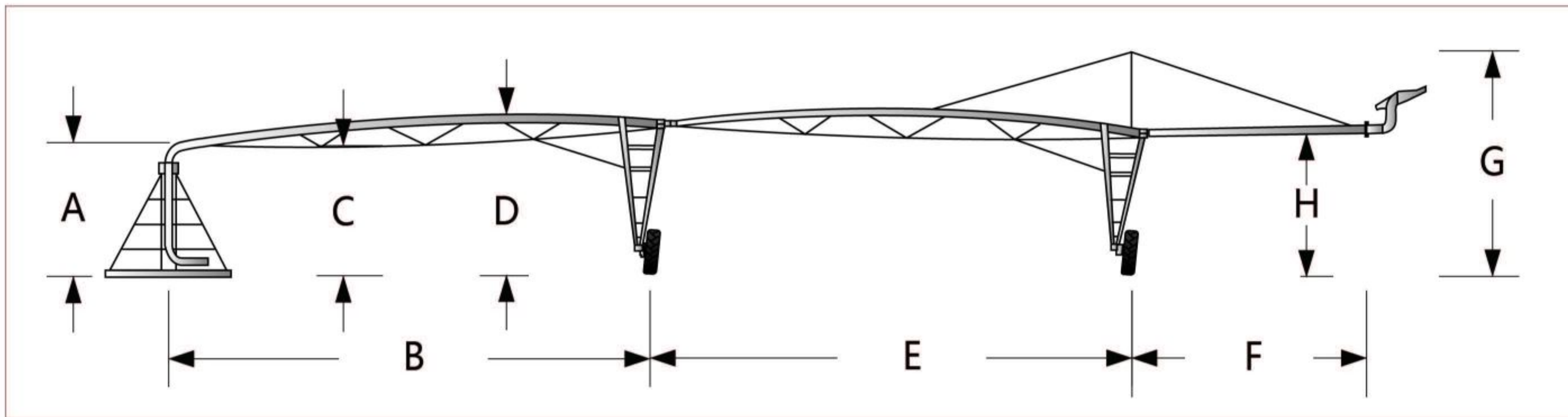
[Overhang size]

Overhand length	F	G	H
22'- 6.71m	25' - 7.62m	17'6"-5.33m	11'5"-3.48m
44' -13.41m	47' - 14.32m	17'6"- 5.33m	11'5"-3.48m
66'- 20.12m	69' - 21.03m	22'- 6.70m	
88' -26.82m	91' -27.73m	22'- 6.70m	

The coverage of a pivot is decided by:

- a. Span b. Overhang c. End gun







Corrosion Protected Center Pivot - Can be used for 50 years

Stainless steel electrical control boxes/pivot riser/joints



control panel



control panel



collector ring



Cable with plug



pivot elbow



pivot riser



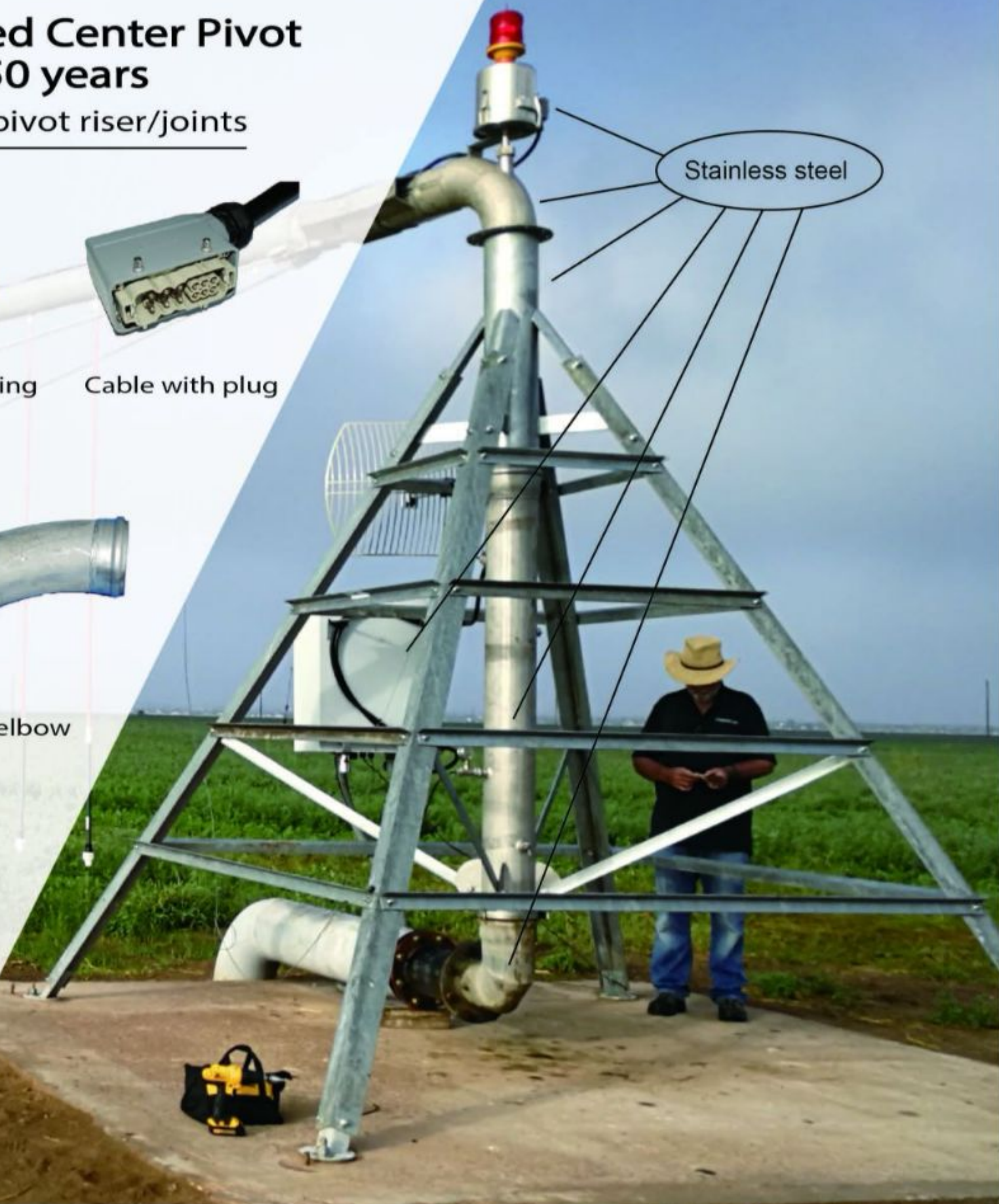
inlet elbow



intermediate tower box



last tower box



Polyline pipes



Pipe 6 5/8"



Gasket + rubber ring

polyline joints



Joint pivot end



Joint tower end

Stainless steel joints



joint tower end



joint pivot end



joint last tower

- Farmers can choose stainless steel or polyline pivot joints as options.
- Special polyline material is stable in hot or cold weather.
- Maximum inner diameter of pipe with only 2.5mm thickness poly lined.
- Stainless steel outlet is designed curved with rubber seal inside the pipe wall.
- Gasket + rubber ring has the best seal between the pipes.
- Both polyline joints and stainless steel joints are available as options

RAINFINE[®]
Irrigation Solution.

**NITRO
PIVOT**[™]



Rainfine Irrigation Co.,Ltd
International sale's office:
Room 2101 Section A,Anda Mansion No.74 Luxun Rd
Zhongshan Dist. Dalian China
Tel:+86-411-82731882
Fax:+86-411-82723239
Mobile: +86-139-4097-2553/133-5228-0266
wangzhi2000@163.com
<http://www.rainfineirrigation.com>