



BundleCut *Evolution*

Band saw
for the dismantling of tube bundle
and recovery of heat exchanger tubesheets

CE

MADE IN ITALY

BundleCut *Evolution*

*Allows rapid and clean separation
of the tubesheet from the rest of the bundle*

For when it becomes impossible to partially retubing the tube bundle from a heat exchanger, MAUS ITALIA proposes the **BundleCut** band saws for the rapid, safe and ecological retrieval of the tubesheet.

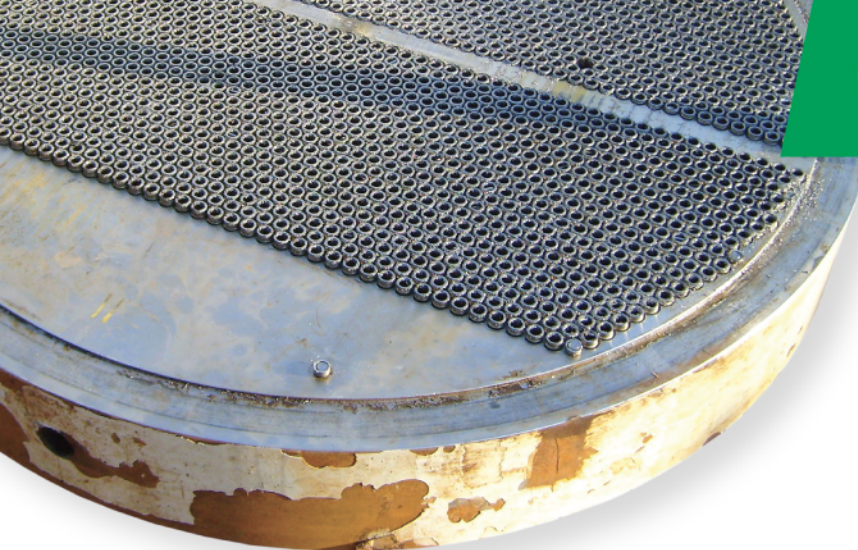
BundleCut has become "Evolution". Years of product evolution have allowed a complete review of the design, enabling MAUS ITALIA 's band saws to be even safer, better performing, more precise and state-of-the-art.

Thanks to the high level of cleanliness in the cut, in combination with the **Grippul** series quick-fastening tube stub extractor and **Onlypul** and **Runpul** continuous tube extractors, the **BundleCut** facilitates and speeds up the recovery of the tubesheet without damaging its holes.



Used for over 20 years
in workshops
across the globe





BundleCut *Evolution*

Band saw
for the dismantling of tube bundle
and recovery of heat exchanger
tubesheets



**Precise
cut**

Precise and clean cut

The tube stubs, with no deformities or metallic burrs, are removed easily without damaging the tubesheet holes



**High
safety**

High safety

The photoelectric barrier, if crossed, stops the blade automatically to ensure maximum safety in the cutting zone



**Healthy
environment**

Healthy environment

The elimination of harmful gases generated by traditional flame cutting and the removal of cutting dust with a grinder make the work environment healthy



**Smart
cutting**

Smart cutting

The ability to continuously control the speed of descent of the cutting arc allows maximum speed without compromising the life of the blade.



**High
productivity**

High productivity

Thanks to its practicality of use and the speed and precision of the cut, it is indispensable for heat exchanger maintenance workshops.



**High
strength**

High strength

It can be used for the simultaneous cutting of the shell and the bundle as well as the cutting of solid rounds



**Max. O.D.
tubesheet**

Ø max. tubesheet

BundleCut 2000
Evolution

BundleCut 3000
Evolution

78" (2000 mm)

118" (3000 mm)



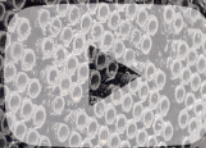
**Bundle
press**

Rapid locking

The (optional) hydraulic press rapidly locks the tubesheet, safely speeding up the positioning operations



Watch the video



+ Optional



User-friendly.

Operational simplicity

The controls on the console allow total control of the process simply, intuitively and at the correct safety distance.



Smart cutting

The ability to continuously control the speed of descent of the cutting arc allows maximum speed without compromising the life of the blade.

- Hydraulic unit thermal protection
- Hydraulic unit start/stop
- Emergency STOP
- Blade motor thermal protection
- Blade motor start/stop
- Open/close blade guide
- Blade failure indicator
- Tighten/loosen blade
- Open/close **BundlePress** (optional)
- Arc ascent limit switch
- Arc movement joystick
- Turn on **BundleCut** (General operation)
- Arc descent limit switch
- Fast

Control of work parameters

Thanks to the integrated SIEMENS LOGO! TDE panel with LED backlighting, the setting and display of parameters is quick and simple.

BLADE

- Blade motor absorption display
- Adjustment of blade rotation speed
- Blade rotation speed display
- Storage of set cutting speed

ARC

- Display of arc descent speed
- Display of distance travelled by arc
- Display of distance remaining to end of cut

+

- Display of time elapsed since beginning of cutting cycle
- Display of time remaining until end of cutting cycle

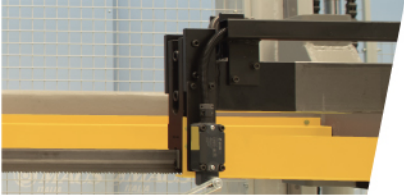


Blade tension control

Automatic control of blade tension and total machine stop in case the blade breaks or falls from the flywheels.

Blade rigidity control

The blade guides, operator-adjustable using a hydraulic device, always remain alongside the tube bundle during cutting, ensuring the correct and continuing rigidity of the blade without requiring the machine to be stopped.



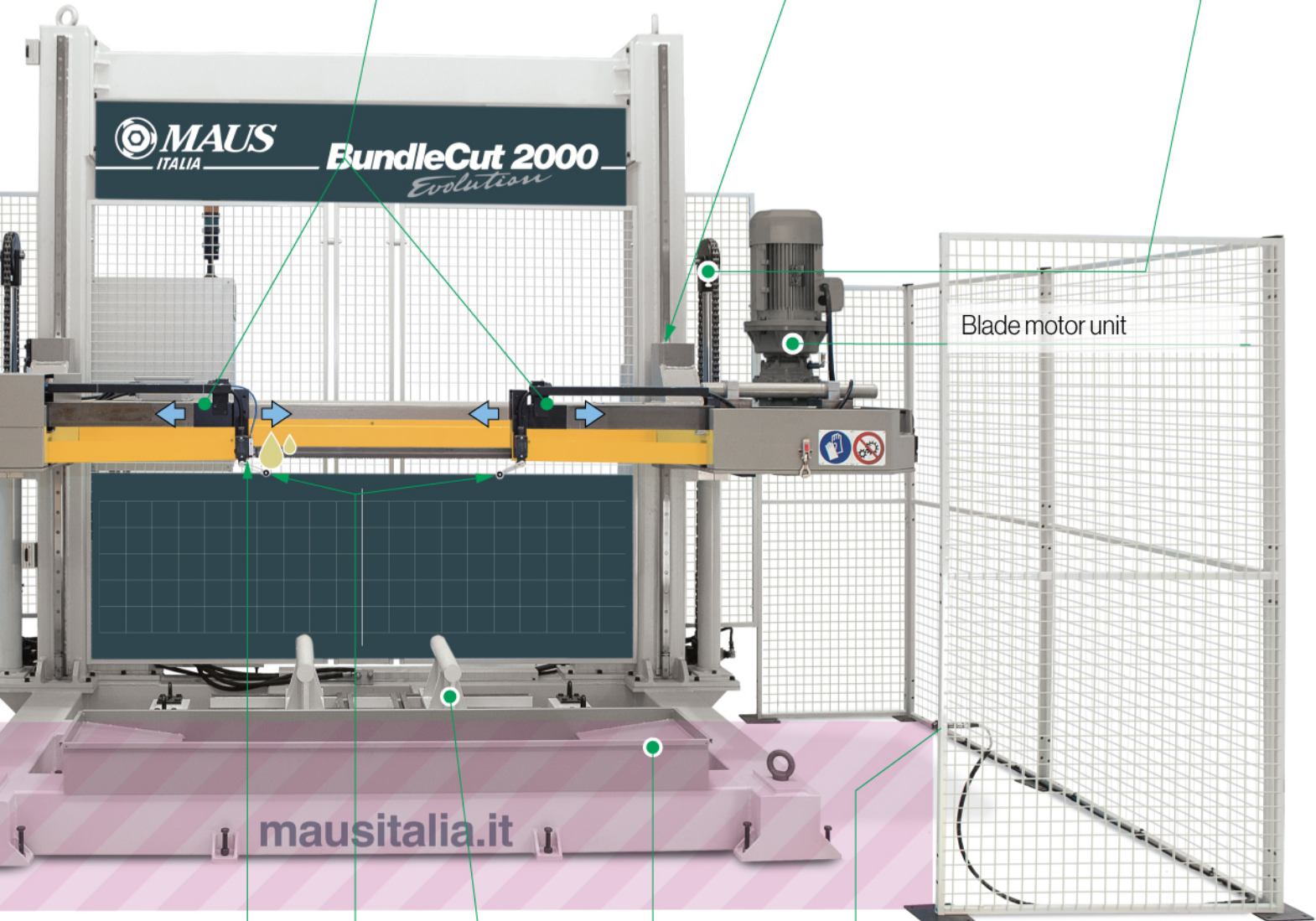
High rigidity in the sliding system

Thanks to pairs of profiled recirculating ball linear guides with high load capacity, the vertical movement of the arc is extremely fluid and rigid. The integrated greasing system extends times between maintenance.



Compact transmission

The use of transmission chains on the movement of the lifting cylinders reduces the overall dimensions of the **BundleCut** and the vertical stroke of the pistons, giving greater stability during a continuous and extremely clean cut



Blade motor unit

mausitalia.it



Automatic lubricator

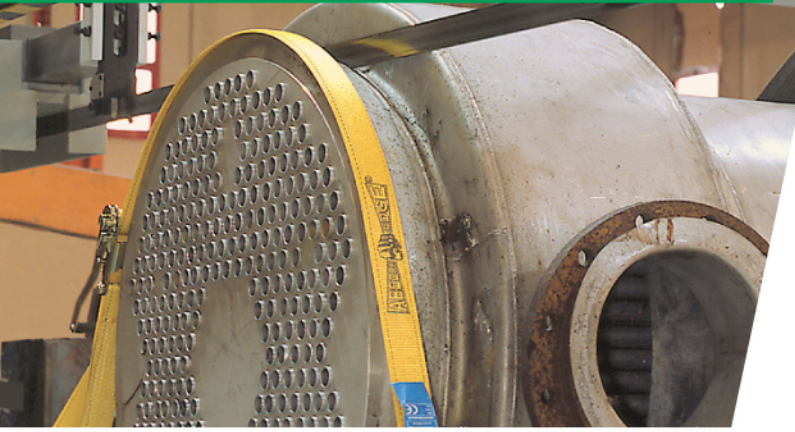
Anti-collision devices

Adjustable tubesheet supports

Chips collector

Metal enclosure with optical barrier





Machine status reports

Complete range of signals and alarms. These support the operator during the operational phase and job setting

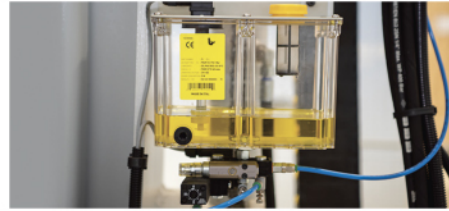
Electrical cabinet and maintenance control panel

In addition to the main switch, there are commands to disable the blade motor to unlock or replace the blade



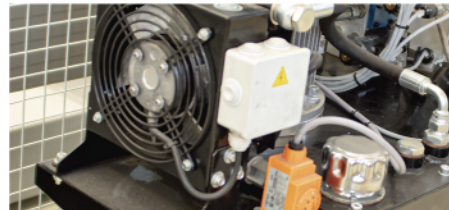
Lubrication unit

Pneumatic lubrication system with frequency and deposit capacity regulator for the cutting oil on the blade



Hydraulic oil cooling system

Guarantees long periods of use by keeping the hydraulic system oil at the correct temperature



Oil tank

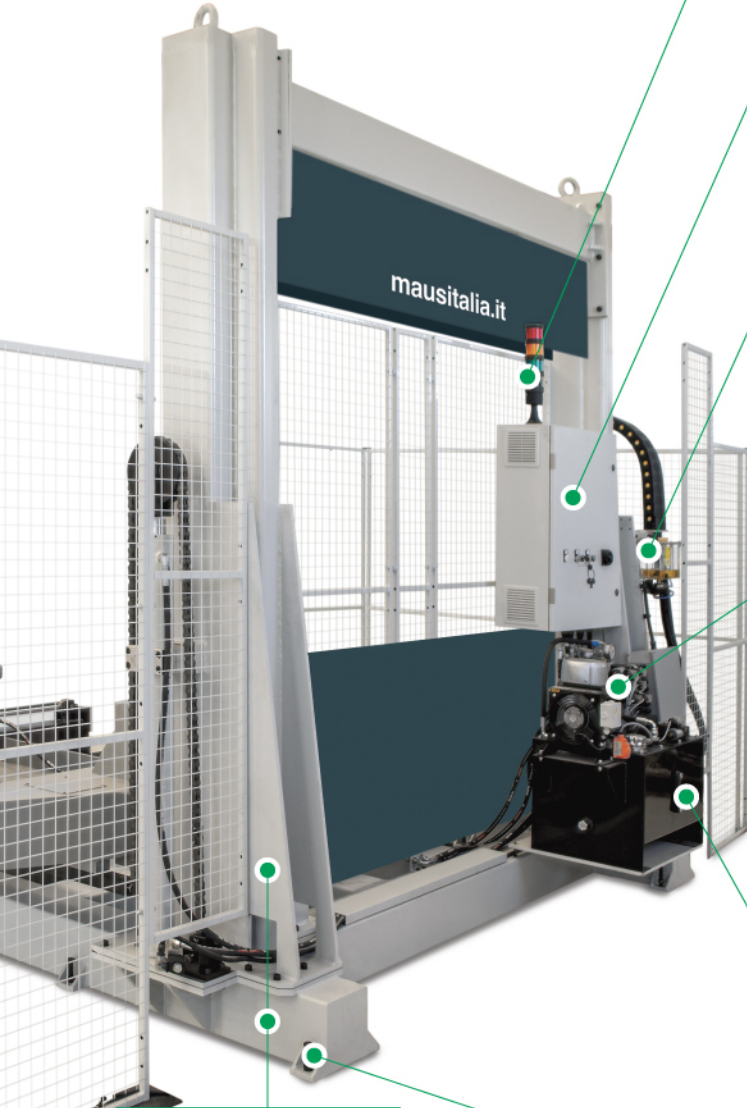
The large tank is equipped with an oil temperature control and drainage cap

Base and structure in electro-welded steel

Due to its high weight and new technical features, the **BundleCut** is extremely rigid to guarantee an extremely "clean" cut

Fixing and levelling feet

18 fixing points for suitable anchor bolts or for fixing on anchor plates. After positioning, these allow the base to be levelled.





BundleCut *Evolution*

+ Optional

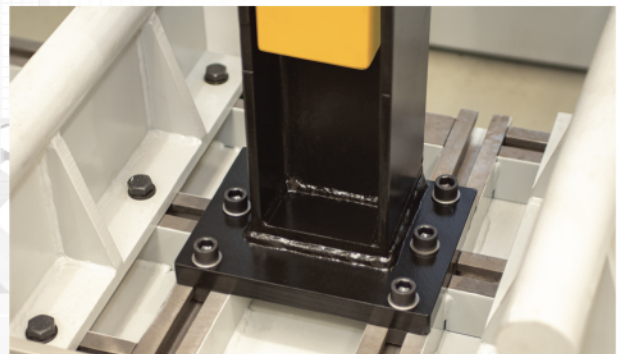
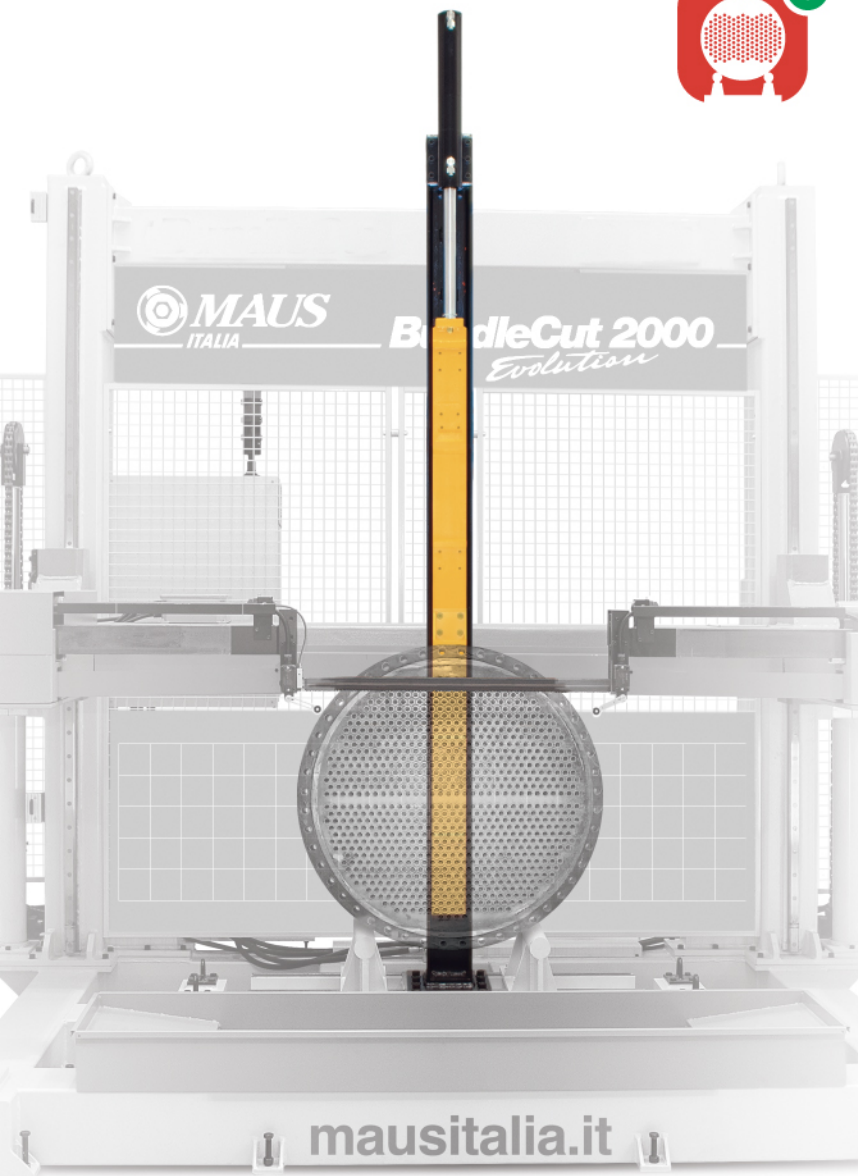
MAUS ITALIA proposes two products which have been required over the years by increasingly demanding customers as optional extras



BundlePress **+**

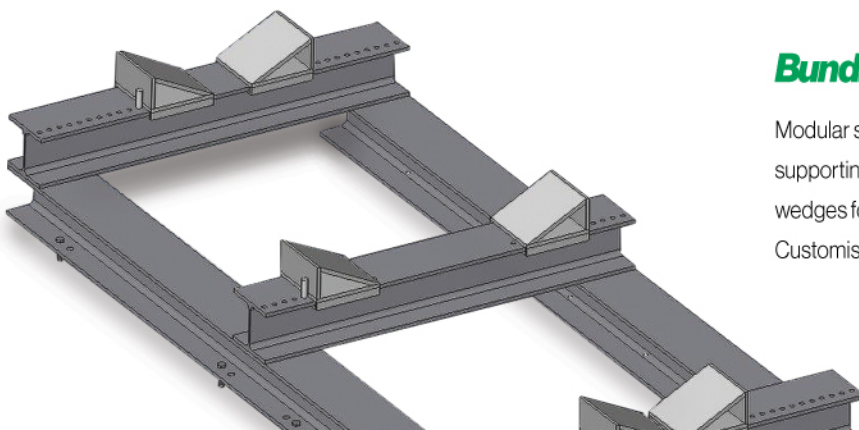
In place of anchoring straps with ratcheting tensioner, MAUS ITALIA proposes a device for the rapid locking of the tube plate.

It comprises a vertical hydraulic press, controlled from the console, which, mounted on the base, enables the loading of the tube bundle and the unloading of the separated tube sheet to be accelerated.



BundleSupport **+**





Modular structure with a standard length of 4000 mm (13 ft) for supporting the tube bundle in front of the **BundleCut** with sliding wedges for adaptation to the diameter of the bundle to be cut. Customisable dimensions for shapes and lengths as needed.



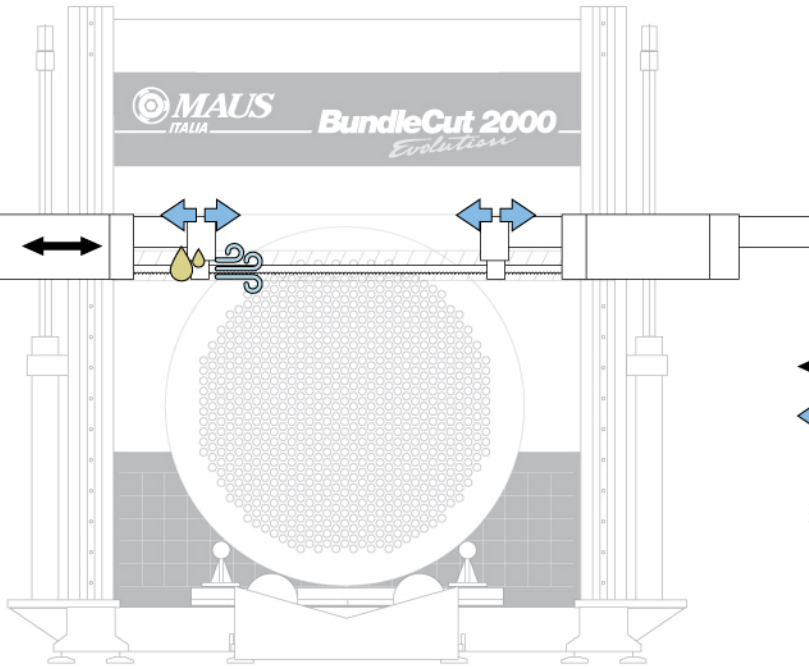


Precise and clean cut with all materials

To ensure a **precise cut without metal burrs**, and a **long life of the blade**, the following can be continuously monitored:

-  blade tension;
-  automatic opening and closing of the blade guides;
-  lubricant supply;
-  constant air cooling of the blade.



By doing so, the tube stubs, non-deformed and without burrs, can be easily removed (with **Grippul** series tube extractors), without damaging the holes in the tubesheet, thus allowing quick recovery.

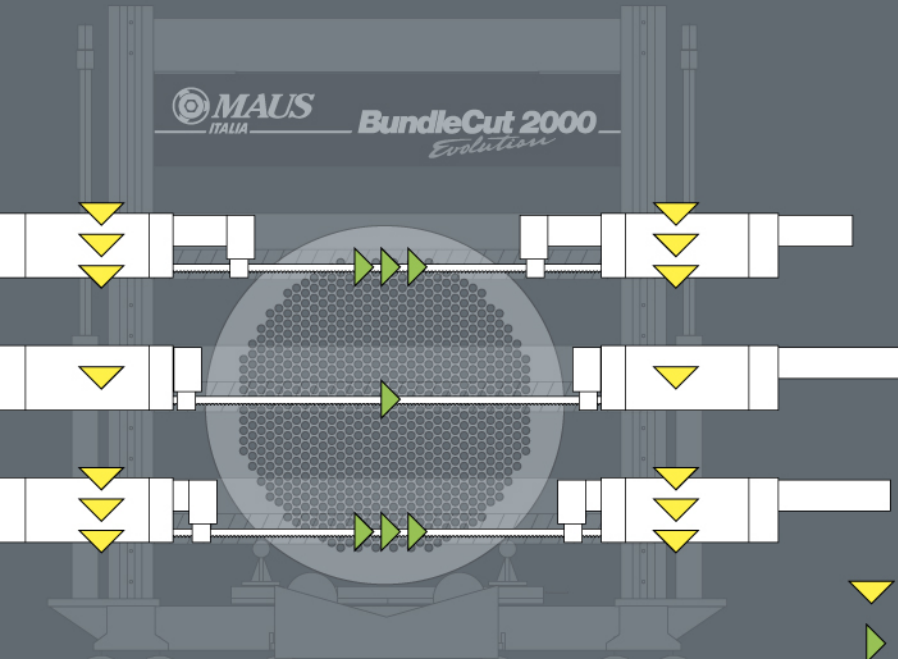


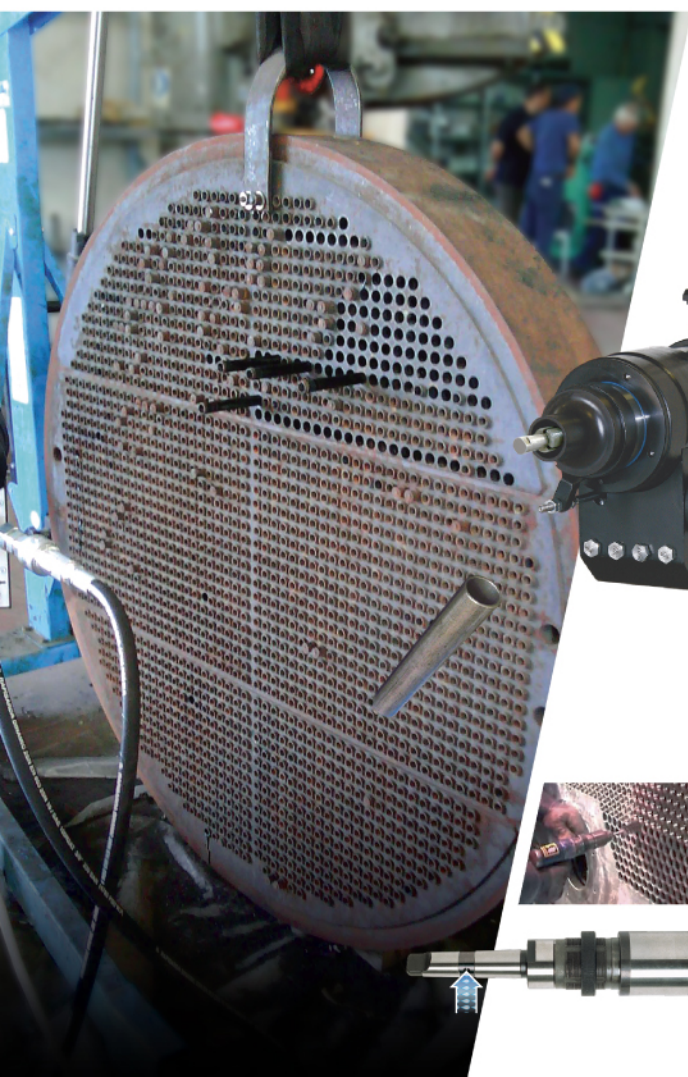
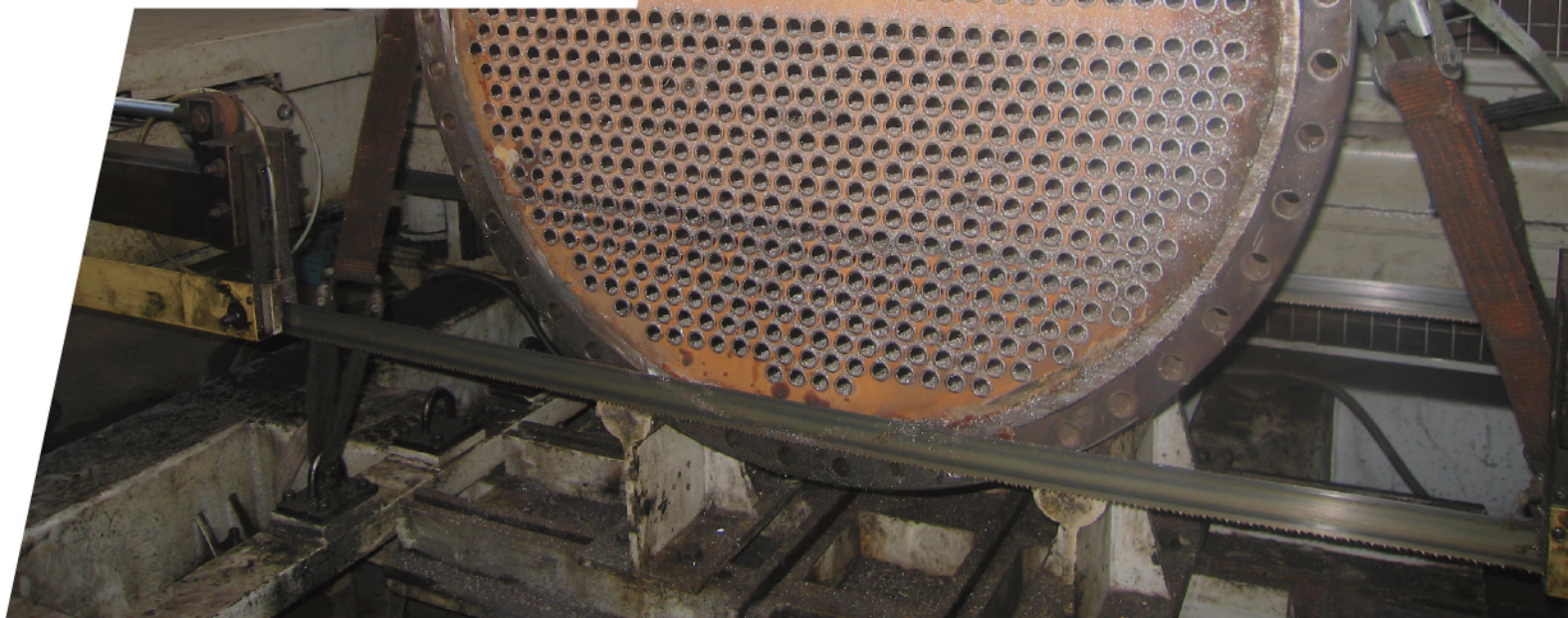
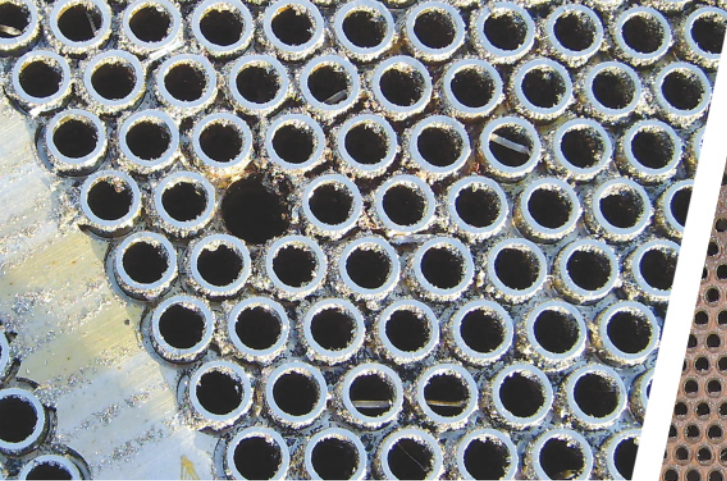
Smart cutting

The exertion of the blade during the cut is directly proportional to the variation in the section of the tube bundle:

the operator's control of the speed of descent of the cutting arc and the speed of rotation allows maximum speed without compromising the life of the blade.

-  speed of descent of the cutting arc
-  speed of blade rotation



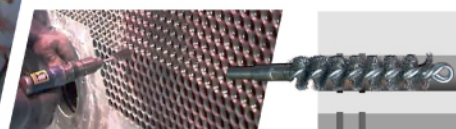


The ideal combination in tube sheet recovery

The **BundleCut** tube bundle band saw is used in combination with the **Grippul** extractor for the removal of tube stubs, resulting in a tube sheet ready for reuse.

To recondition the holes and grooves, we also recommend the use of **FB** brushes and **F26** chasers

For further details on recommended equipment, please refer to the relevant trade brochures.



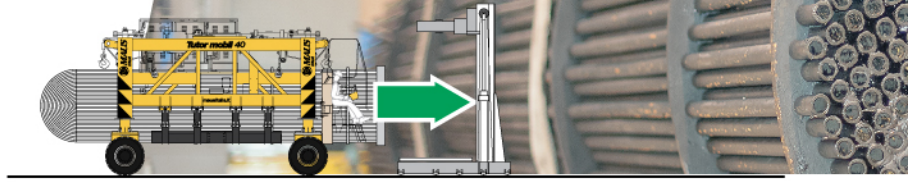
FB
Steel brushes for reconditioning the holes

F26
Self-centring grooving tool with adjustable depth
with interchangeable HSS-Co blades

Cutting procedure

1 Positioning

The heat exchanger is positioned in front of the **BundleCut** using a bridge crane or **BundleTutormobil** conveyor on to the **Bundle support** and the support brackets are adapted to give the correct support



2 Fixing

The fixing of the tube sheet is ensured by an anchoring strap with a ratchet tensioner or with a **BundlePress** hydraulic vice (optional) which speeds up the operation

3 Cutting

Operator-controlled cutting with a circular blade allows precision cutting of tube bundle in a short time without polluting the work environment and without damaging the tube stubs being removed

4 Separation

At the final cut, the tube bundle is moved while the tubesheet remains secured to the **BundleCut**. The neatly cut tube stubs left in the tube sheet are ready for extraction.

5 Stub extraction

Thanks to **Grippul** series tube extractors, the tube stubs left in the tubesheet are easily removed without damaging the holes

Spare parts



Blades

MAUS ITALIA supplies bimetallic band blades according to the model of selected saw (**BundleCut 2000** or **BundleCut 3000**).

Selection of the blade is made according to the type of work to be carried out.

The following are factors in the selection:

- the material to be cut
- the thickness of the tubes
- the features of the exchanger shell (if present).

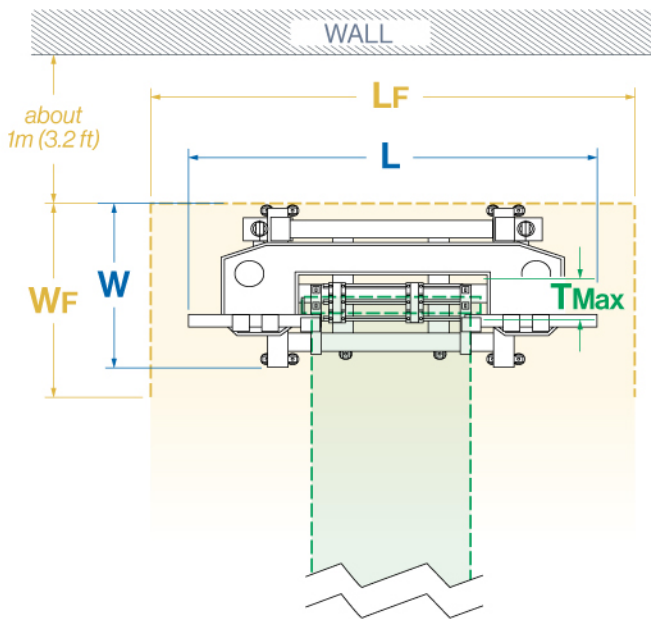
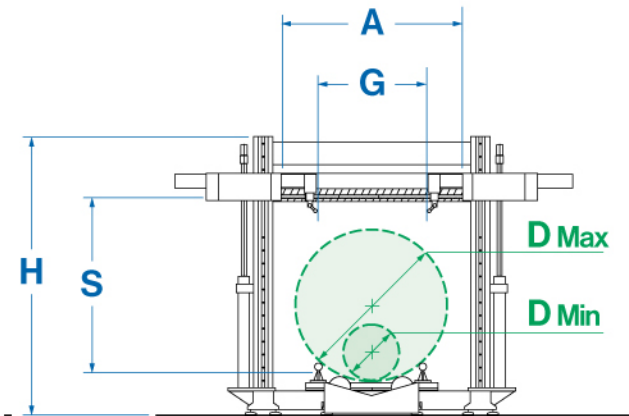
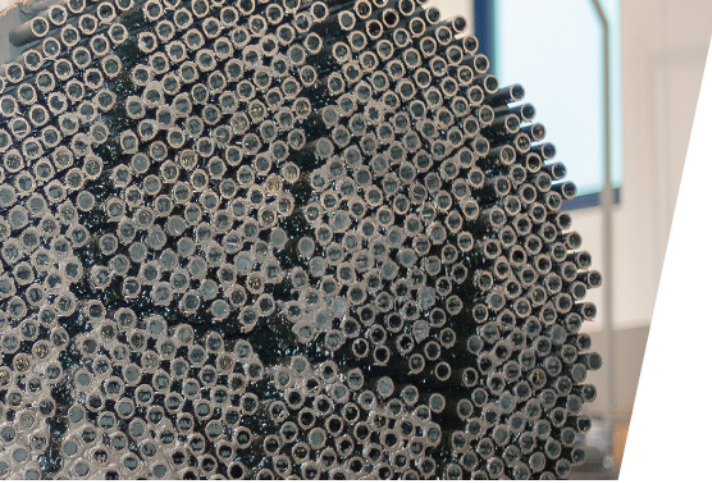
MAUS ITALIA technical staff are available to provide the correct information.



Material to be cut	Z serration	Blade material
Aluminium	4-6	M42
Copper 50÷60	5-7	
Brass 60÷80		
Carbon steel	6-10	
Stainless steel		
Titanium 15÷20	4-6	M51
Inconel 14	5-7	
Duplex 14÷16		

BundleCut Evolution

Technical features



BundleCut Evolution		2000		3000	
∅ tubesheet (max.)	D Max mm inches	2000	78.7	3000	118.1
∅ tubesheet (min.)	D Min mm inches	200	7.9	350	13.8
Tubesheet thickness (max.)	T Max mm inches	600	23.6	800	31.5
Cutting speed (min-max.)	m/min ft/min	20-250	65-820	10-140	32-460



BundleCut Evolution		2000		3000	
Electrical system					
Power supply voltage	V-ph-Hz	400-3-50/60		400-3-50/60	
Absorbed power	kW	8,0		16,0	
Hydraulic unit power	kW	2,2		4,0	
Blade motor power	kW	5,5		11,0	
Hydraulic system					
Tank capacity	l Gal/Us	40	10,5	100	26,4
Pneumatic system					
Air supply	bar psi	4÷8	58÷116	4÷8	58÷116
Dimensions					
Width	L mm ft	3730	12.3	5160	17.0
Depth	W mm ft	2300	7.6	2300	7.6
Height	H mm ft	2950	9.7	3720	12.2
Width of required space	LF mm ft	4900	16.1	6700	22.0
Depth of required space	WF mm ft	2500	7.3	2500	8.2
Blade guide light	G mm inches	1900	74.8	2900	114.2
Arc light	A mm inches	2200	86.6	3040	119.7
Vertical stroke	S mm inches	2000	78.7	3000	118.1
Weight	kg lb	3700	8160	7700	16980
Degree of protection	IP	54		54	



BundleCut Evolution shipment		2000		3000	
Width	cm ft	410	13.4	552	18.1
Depth	cm ft	248	8.1	248	8.1
Height	cm ft	332	10.9	417	13.7
Case weight	kg lb	1090	2400	1575	3470
Total weight	kg lb	4790	10560	9275	20450



Refers to use of provided standard fasteners. Customised fixings on request permit the reduction of the diameter as needed



For power supplies other than 400V-3ph, MAUS ITALIA supplies a suitable transformer



MAUS ITALIA S.P.A.
SP415 KM30 (nuova strada di arrocco)
26010 BAGNOLO CREMASCO (CR)
ITALIA

Tel. +39 0373 2370
expo@mausitalia.it



© 2020 Maus Italia, all rights reserved.

The technical data shown may change at any time without notice.
This document is to be considered purely indicative and does not constitute a product offering.