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Remal Thorid Fully Automated Powder Coating Plant

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We might be able to meet your requirements with other Powder coating, wet paint plant & equipment machines.



Stock No Manufacturer Model Year of Manufacture Work Envelope (WxDxH mm) Process Stages Other Info Location External Dimensions (WxDxH mm)

<u>JR0001</u>

Remal Thorid Fully Automated Powder Coating Plant 1995 700mm High x 400mm Width 3 Stage pretreament + powder application NO "Buyers Premium" applied to this sale Nu Swift Ltd UK 15M x 7.5M x 4.2M High

Description

Equipment Footprint (as laid out presently) Overall Footprint – 15M x 7.5M x 4.2M – (length /width/height) Maximum Part Dimension (AS PRESENTLY CONFIGURED)– 700mm High x 400mm Width



Riley Industries Ltd A subsidiary of Barry Riley & Sons Ltd. Director: M P A Riley, Secretary: D Hemming Registered in England no. 1965748



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Number of Jig Hangers – 566 Maximum Object Weight per Hanger – 23Kg, but can hang 46Kg on a coupled pendant.

Process Flow:

The process flow on this Thorid Automated Powder Coating Line, is as follows:

Stage 1 – Loading

Conveyor OEM - Midland Handling Equipment.

Model – Trackmaster 304.

Track Speed - 0-750mm/Minute

Track Length - 85 Metres

Loading of parts, via the 283 off, 360 degree swivel hangers attached to the main conveyor, which has a variable speed option.

Stage 2 – Pre-Treatment Chamber L x W x H in Metres = 9.2 x 3.0 x 3.8

A Three Stage (single zone), on line pre-treatment chamber, comprising of the following.

a) Degrease - Heated.

b) Cold Water Rinse - Ambient.

c) Phosphate – Heated.

All the above are by way of high pressure spray application of proprietary process chemistry, via multidirectional nozzle arrangement, as the components pass through the totally enclosed chamber.

The heating stages (Degrease & Iron Phosphate) are affected by way of gas heating using :

1 x Comtherm TF04 Gas Burner on the Degrease Stage

1 x Comtherm TF04 Gas Burner on the Iron Phosphate Stage.

Serial Number - 2510-4

KW – 100

Fuel – NG – 20mBar – 240V/50HZ

All process solutions that are introduced into the pre-treatment chamber are continuously pumped & recirculated from the fully integrated chemical storage tanks (low level) with temperatures control monitoring and adjustment via the easy to use operator friendly control panel module that sits outside the main footprint of the plant but is easily reconfigured to be housed within the footprint if needs be.

Stage 3 – Flash/Dry Off Chamber – L x W x H in Metres = 6.3 x 2.4 x 4.2

This stage is a fully self-contained dry off oven, with LEV, that ensures parts receive a thorough hot air dry-off, prior to the powder coating operation itself and again is controlled from the mains control panel module in terms of air temperature The heating source at this stage of the process is by way of gas using:

1 x Comtherm PC05 Gas Burner

Serial Number – C2510

KW – 100.

The hot air is driven around the envelope of the oven, via a suitably rated recirculating fan (Fan Engineering) and distributed evenly by louvered vents, so as to ensure temperature uniformity within the hot zone and products, as they passes through this stage prior to being powder coated.

Stage 4 - Powder Coating / Dust Extraction/ Powder Recovery – L x W x H in Metres =5.0 x 4.5 x 3.8 Powder Coating is carried out via two electrostatic powder coating guns, fixed to a main reciprocating boom and one manual "touch-up" gun that are housed outside the powder coating booth for easy operator control. Powder Guns are





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2 x THORID PG1000 with variable KV control fixed to reciprocator
1 x THORID PG1000 Manual Touch Up with variable KV control
All variables are controlled from the fully encased main Powder Control Centre which is a.
REMAL THORID - ER200H
Powder Monitors x 2 – Type – PC1
Powder Coating Generators x 2 - HTG100
This user friendly free-standing control panel features easy to adjust process control, so that the Kilovoltage (KV) to the guns can be altered depending on complexity/geometry of the object piece, a crucially important feature for powder and transfer efficiency.

The powder coating dust filtration plant is attached to the powder booth and a very notable feature of this expertly designed part used powder coat line, is that it has a powder coating recovery unit by OEM leaders in powder recovery:

Kemutec Powder Recovery Unit Type – 7295 MS7013.

Stage 5 – Main Curing Oven Chamber – L x W x H in Metres = 5.5 x 3.5 x 4.1 The final powder curing stage, is carried out in a free-standing box oven, on an S type return principal, where-by parts receive heat by via a uniform temperature created by a gas fired burner by : Comtherm – PC15 Gas Burner Serial Number – C2510/2 KW – 150 Temperature control is adjusted via the mains control panel, using the simple LCD temperature controller. Heat is forced through the chamber by a recirculating fan and fed via louvered ductwork within the chamber Recirculating Fan is a : Fan Engineering – Type- FE9873F

A powered axial fan on the intake, allows for localised exhaust ventilation and as parts exit out of the plant there is ample opportunity to inspect parts before they are removed for onward processing

Photographs taken prior refurbishment. Our refurbishment service is not available on all machines.



