



TRO

Bobbin, tops, muff,
dyeing systems

Main Features

TRO machines are the suitable solution for customers who prefer to avoid the installation of a crane or in case of limited building height. Horizontal machines have all the characteristics previously mentioned for RVS machines.

Please refer to previous pages for general features and options (from page 8 to 13).

In terms of capacity, the range varies from 30 kg to 1500 kg, combining different vessel diameters and lengths.



The air pad system works with the same principle applied for the vertical machines, but the space for liquor thermal expansion is placed on both sides of the kier and in the rear portion. Variable filling level is also a standard feature for reduced loads. TRO machines are mainly used to dye yarn, tops and muffs. Even if it would be possible, these machines are not suggested to dye loose fiber and tow because of material holder configuration. The introduction/extraction of carriers is realized by means of stainless steel trolleys which can be locked in front of the machine and have suitable guide-rails where material holders slides.



TRO machines do not need any foundation and all utilities connections can be placed on the top of the machine for an easier and faster installation and maintenance. Heat exchanger is outside the machine, tube/shell type and positioned on the main circulation circuit.



In a typical installation of TRO machines, most of them have the same diameter and use inter-changeable material holders. In this way, once selected the most suitable capacities for the customer, machines will be modular. For example, it is common to have installation with machines of 250-500-750 kg, respectively loading one, two or three carriers, all interchangeable between different machines.



All TRO machines are available with fully automatic lid opening/closing for intergration in plants with robotized loading/downloading of the carriers. Carriers handling is normally performed with fixed rails positioned on the machines front line where all carriers can slide from a common parking position.

