

*Plating*

AUTOMATIC PLATING LINES

Automatic lines are used in the metal finishing industry to convey parts mechanically through a treatment cycle. Many parts to be treated are commonly held on racks although hooks, wires, trays, baskets, or barrels may be used depending on the kind of work to be processed.

The fact that parts to be treated are handled automatically in these offers a number of advantages, as a result of which they have become universally used in the industry both with high or low volume of work, where direct savings in labour costs and/or other conditions result in over-all economies that justify the investments.

The advantages of fully automatic processing compared to hand operation are as follows :

- Use less floor space
- Larger and deeper tank sizes are possible
- Larger and heavier rack sizes are possible
- Better control of drag-out
- Less danger of solution contamination
- Better rack life and control of insulation and contacts
- More efficient ventilation is possible
- Lower installation cost for a given capacity
- Better process control
- Better production control at high level capacity
- Less costly and improved solution maintenance
- Better control of quality and specifications
- Lower rejects

- More efficient use of labour and material
- Improved working environment

FACTORS IN SELECTING A LINE

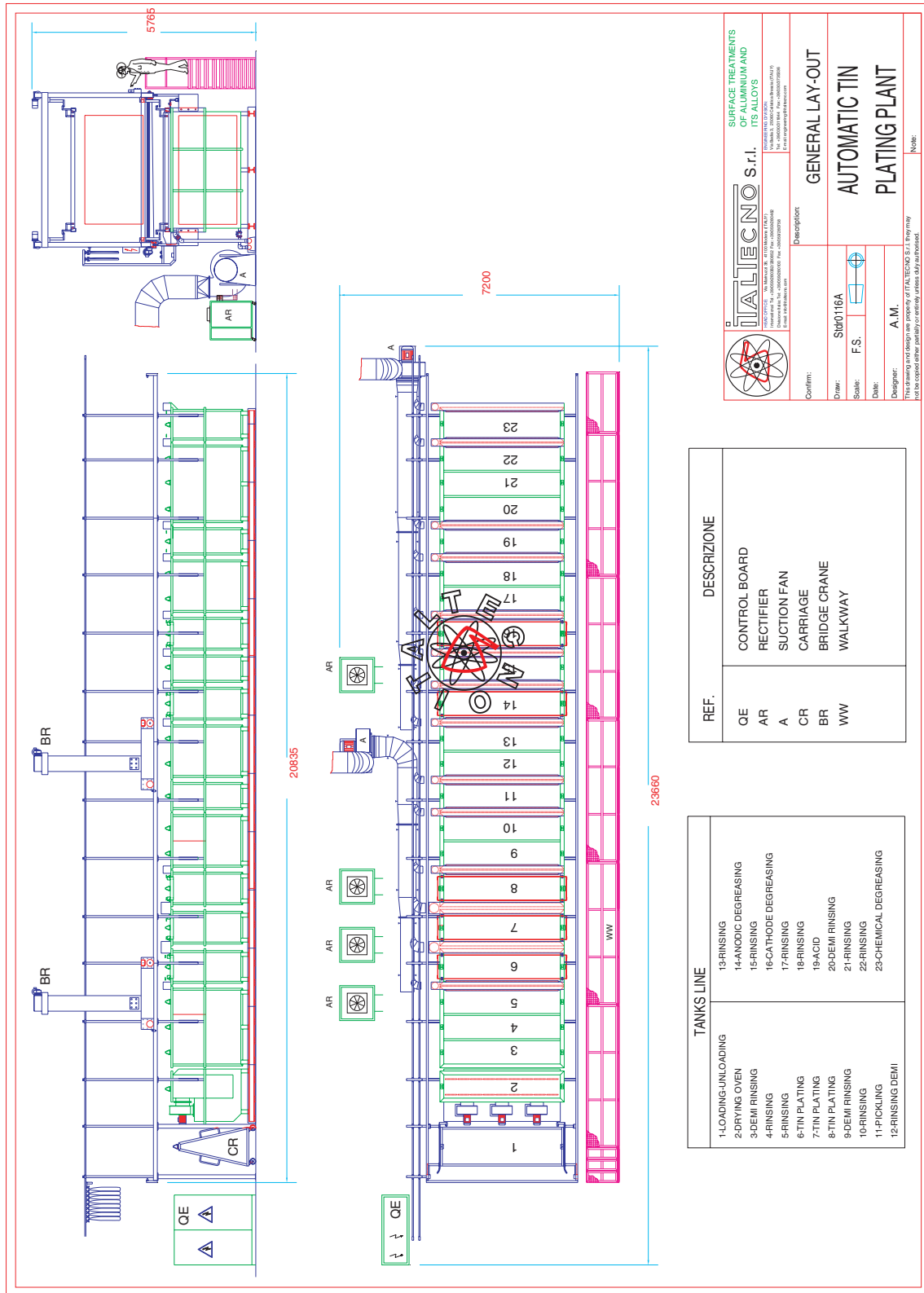
The following factors must be considered when selecting a new line

- Production requirements
- Specifications
- Work load and rack size
- Carrier spacing
- Number of lines
- Treatment cycle
- Total lift at transfer points
- Transfer time
- Anode rod spacing
- Current requirements per load

SPECIFICATIONS

The specifications for the various parts to be processed must be clearly established. These should include :

- a) The basis metal for each part
- b) The significant surfaces for each, i.e. those surfaces which must meet the specification
- c) The nature of the treatment, i.e. nickel-chromium plating or copper-nickel-chromium plating
- d) The minimum thickness of each plated coating
- e) The salt-spray hours which each type of part must pass or similar requirements



Example of plating line lay-out

