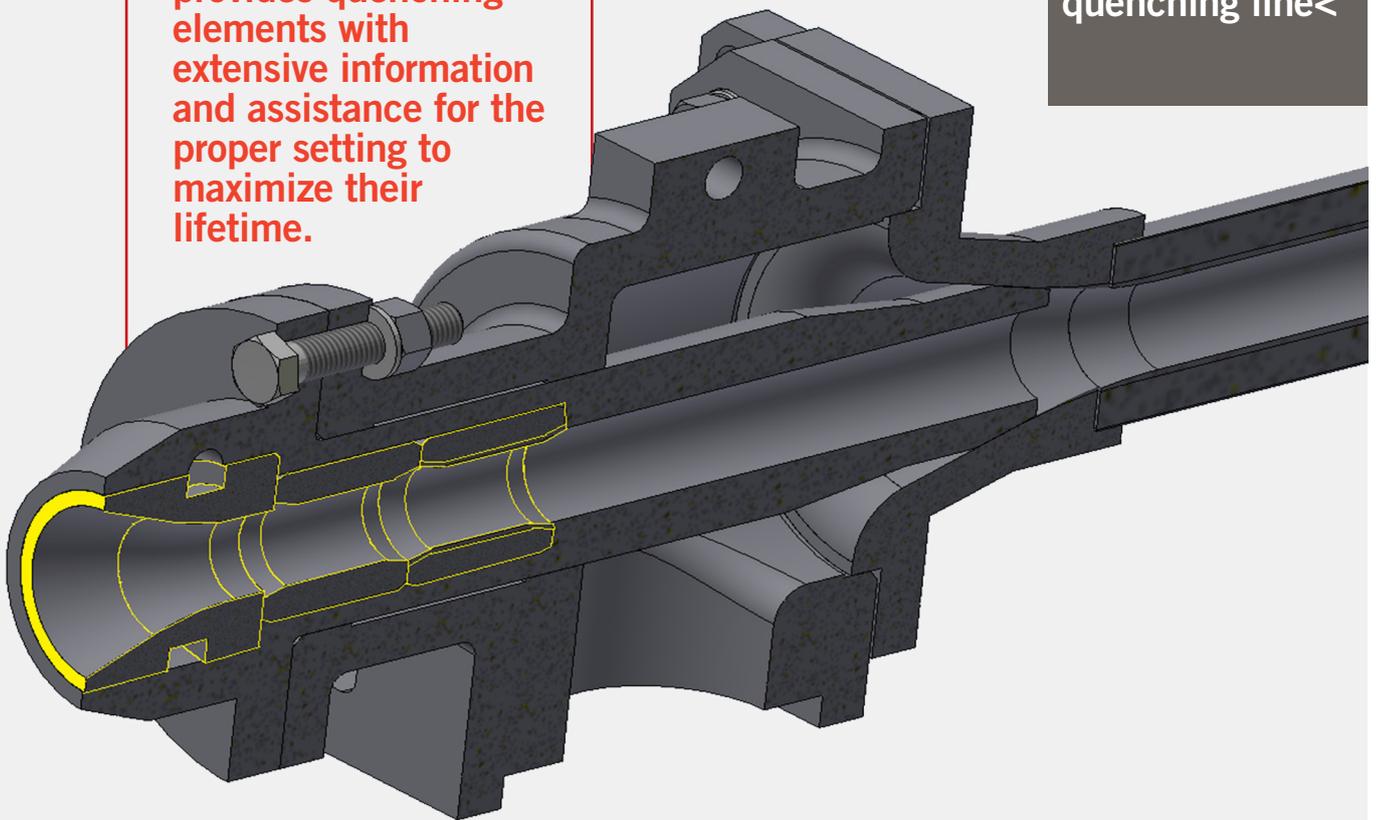


COOLING ELEMENTS FOR QUENCHING LINE

New solutions to improve cooling efficiency

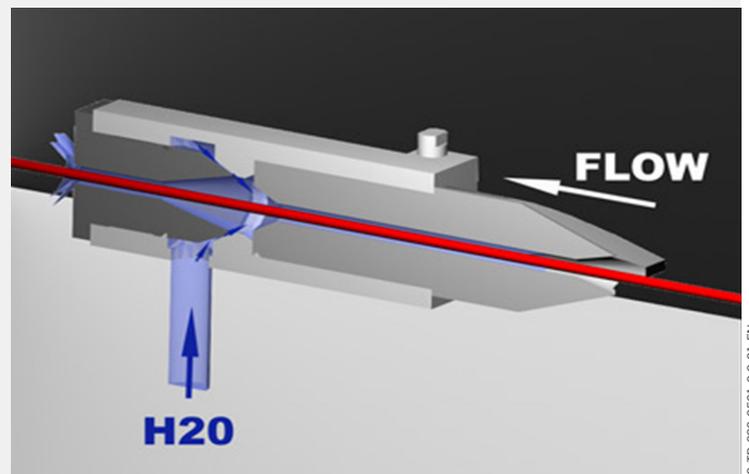
Danieli Service provides quenching elements with extensive information and assistance for the proper setting to maximize their lifetime.



Q-WI
 >cooler, dryers,
 strippers and
 by-pass for
 quenching line<

Everyday rolling mills are focused to improve performances.

The cooling elements are those items in contact with hot steel, fed with high pressure water (coolers), prevent the water from being sprayed out of the coolers (strippers), remove the residual water (dryers) and replace the process elements when not in use (by passes). The wearing of their internal part depends on many factors: material, product mix, rolling speed, steel grades, process temperature, water quality, general maintenance, items alignment, etc. Danieli can provide profitable solution in order to increase life of quenching elements and increase their performances.



COOLING ELEMENTS FOR QUENCHING LINE

New solutions to improve cooling efficiency

COOLING ELEMENTS WITH WEAR INSERTS FOR REBAR

Danieli's target is to supply the best technical and economical solution for customer's specific quenching application. The standard slider (fig.1) is a unique body. Its life can be increased by placing wear inserts (fig.2). They can be provided in stainless steel or tungsten carbide. Furthermore the stainless steel solution applied to the slider body reduces the corrosion due to poor water quality. The combination of stainless steel body and wear inserts, in addition to extend the life time, may lead to operational cost reduction and increased quenching efficiency.

This is a first investment for the purchase of the complete piece and when necessary, only the wear inserts will be replaced.

Body Material	Insert Material
CAST IRON	STAINLESS STEEL
CAST IRON	TUNGSTEN CARBIDE
STAINLESS STEEL	STAINLESS STEEL
STAINLESS STEEL	TUNGSTEN CARBIDE

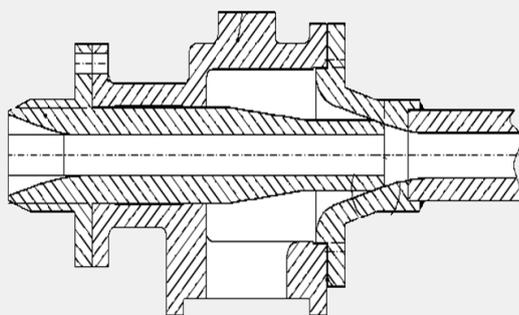


Fig. 1 - STANDARD SOLUTION

WEAR INSERTS

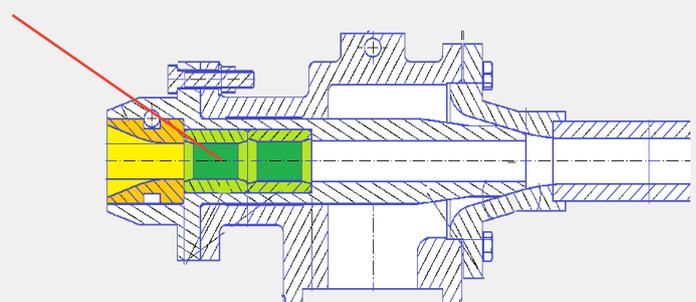


Fig. 2 - IMPROVED SOLUTION

COOLING SET IN TWO HALVES FOR WIRE ROD LINES

In order to allow inspection of the internal part and easily remove possible cobbles, Danieli can provide quenching elements in two halves.

Main features are:

- > Cast stainless steel body supports the entry guide and the cooling pipe, fitted with water inlet.
- > Stainless steel entry guide fixed to the body.
- > Stainless steel cooling pipe fixed to the body, The clearance between the entry guide and the pipe, to control water flowrate, is adjusted by shims.

