

Frequently Asked Questions

About our Ferrous Division

Q. Can I produce steel with low hydrogen using a TunSpray tundish lining system?

A. Yes. Based on the operational conditions and tundish refractory designs, COMAT will make recommendations that will allow the lowest possible hydrogen pick-up in the tundish. In fact, a recent customer significantly reduced the hydrogen pick-up in the tundish by incorporating a TunSpray system in place of another supplier's dry vibratable product.

Q. Can COMAT supply tundish furniture and permanent linings?

A. COMAT can supply any and all tundish refractory requirements including tundish furniture and permanent linings. The tundish furniture is designed through physical water modeling, while a computer finite element heat transfer program is used to develop the tundish back-up refractory system.

Q. What does a PREVENTUR pad do?

A. A PREVENTUR pad is a specially designed impact pad for the tundish. It withstands the erosive force of the ladle stream exiting the ladle shroud while modifying the resultant flow pattern in the tundish. The PREVENTUR does this by redirecting the downward flow velocity in an upward and inward direction. This causes intimate contact between the downward and upward flowing velocity components. The resultant flow exits the PREVENTUR pad area at a lower velocity and upward towards the surface of the bath. This promotes inclusion flotation and temperature homogeneity.

Q. Can I reduce my intermix steel by using PREVENTUR turbulence inhibitor pads in my tundish?

A. Yes, the PREVENTUR pad creates more plug flow behavior unlike flat pads that promote mixed flow behavior. Water model and steel studies have shown that the PREVENTUR pad can reduce intermix time by up to 25 to 30%. This will translate into higher prime yield savings during grade exchanges.

Q. Can you eliminate tundish furniture when you use a PREVENTUR turbulence inhibitor pad?

A. It has been our experience that the majority of the time the answer to this question is yes; however, every tundish is unique and should be considered individually.