

TAPPING OF TOOLOX® 44

Toolox® is an excellent steel for the production of high performance machine components as well as mould and dies. Toolox® is based on an ultra-clean steel metallurgical concept that gives it extraordinary properties. Combining high strength with high toughness and fatigue resistance. The homogenous structure as well as the low carbon and alloy concept make gives excellent machining properties.

Most products made in Toolox are machined. Toolox® 33 has much better machining properties than other steels with same hardness. The parameters can be increased, increased lifetime of inserts and the geometrical stability make it possible to increase productivity in an impressive way. Toolox® 44 despite being delivered with 45 HRc, also machines effectively with modern machining and tooling. Some operations might create difficulties for a new customer. One of those is tapping.

To better give tapping recommendations to the customers, Approved Toolox® Dealer Aceros Levinson (www.aceroslevinson.com) organized testing together with Sandvik Coromant Mexico. Sandvik Coromant obviously has the highest possible quality Tooling guaranteeing top performance.

As first step, 8.6 mm diameter holes was drilled with a 860.1-860.1-0860-080A1-PM PIBM drill. Then chamfering was made and finally M10 tapping was done using a T300-XM100DA-M10 C150 tap. Parameters used can be seen below. 150 threads were made without any problems before the tap broke.





The results from the Sandvik Coromant tapping testing shows that threads in Toolox® 44 can be made in a perfect way without any complications. As long as the right parameters are used and top tools are implemented.

Availability

Plates and blocks from 6 – 320 mm. Bars between 21 and 405 mm with lengths up to 5000 mm. Toolox® is available from the local SSAB stock. Cut pieces of Toolox® can be obtained through the well-established global network of Approved Toolox® Distributors. Both SSAB and distributors can also provide you with good application support as well as technical guidelines.

Contact and more information

Contact your local sales representative to learn more, visit www.toolox.com or consult Tech Support at: help@ssab.com