

TC2020TM

JDE: SOFTWARE INTERFACE WITH EXTERNAL SYSTEMS

MATERIALS DATABASE AND JDE MODULES ALLOW TO WORK WITH EXTERNAL CAD/CAM SYSTEMS.

SOFTWARE LICENCE CAD/CAM TC2020 + JDE

TC2020 IS A CAD/CAM SOFTWARE THAT ALLOWS THE COMPLETE MANAGEMENT OF THE WATER JET CUTTING SYSTEM TECHNOLOGY. IT IS THE RESULT OF CMS' EXPERIENCE IN THE WATERJET TECHNOLOGY.

IT CONSISTS OF 8 MODULES:

1. DRAWING (CAD)
2. MATERIALS DATABASE (DB)
3. NESTING AND CREATION OF A CUTTING LIST
4. DEFINITION OF THE CUTTING METHOD AND PARAMETERS
5. CREATION OF CUTTING PROGRAMS (ISO) AND TAPER CORRECTION (JDE)
6. PRODUCTION REPORTS SHOWING THE CUTTING TIMES AND ESTIMATES
7. 3D MODULE AND SPECIAL MACHINES (OPTION)
8. INTERFACE WITH EXTERNAL SYSTEMS

DRAWING

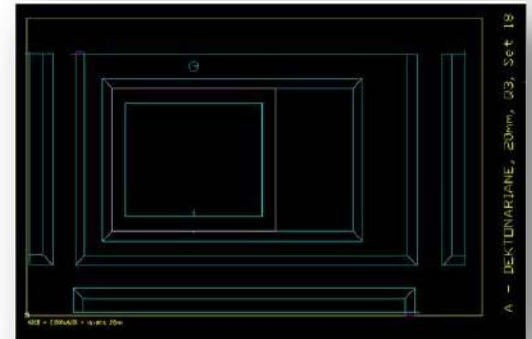
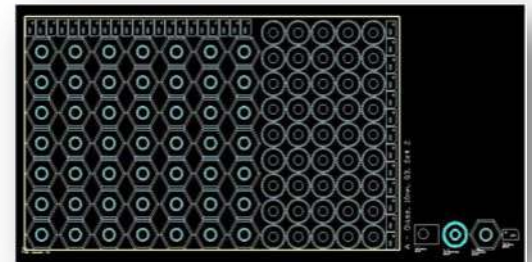
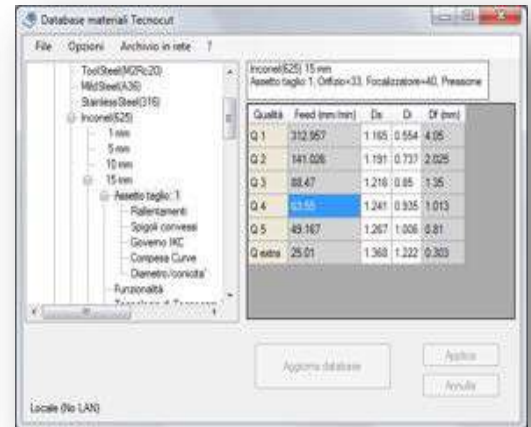
A USER-FRIENDLY INTERFACE ALLOWS DRAWINGS OF 2D AND 3D SHAPES. DXF FILES MAY BE IMPORTED AND MODIFIED THROUGH THE USUAL EDITING METHODS AVAILABLE WITH MOST CAD SYSTEMS.

MATERIALS DATABASE

THE SOFTWARE IS SUPPLIED WITH A DATABASE WITH CUTTING PARAMETERS FOR TO THE MOST COMMON MATERIALS USED IN WATER JET CUTTING. THIS SYSTEM CAN ALSO BE FULLY IMPLEMENTED TO MEET ANY PRODUCTION DEMAND.

NESTING AND CREATION OF A CUTTING LIST

CUTTING LISTS CAN BE CREATED STARTING FROM MATERIAL TYPE, SIZE AND THICKNESS. FOR ANY PIECE THE SHAPE CAN BE IMPORTED AND THEN THE EDGE FINISH AND QUANTITY IS SELECTED. THEN THE NESTING MODULE AUTOMATICALLY ARRANGES THE BEST PLACEMENT FOR EACH SHAPE ON THE SHEET.



CUTTING METHOD AND PARAMETERS

SPECIFIC PARAMETERS CAN BE ASSOCIATED TO EACH PIECE AND PART.

THIS CAN BE DONE USING THE PARAMETERS STORED IN THE DATABASE OR BY SETTING NEW ONES ACCORDING TO THE USER'S NEEDS.

THE MAIN OPTIONS ARE:

- TO CHANGE LEAD-IN AND LEAD-OUT POINTS' POSITION AND SHAPE
- TO CHANGE TYPE, PRESSURE AND TIME OF EACH DRILLING
- TO ASSIGN DIFFERENT CUTTING SPEEDS TO EACH PART OR FEATURE
- TO CREATE MICRO-JUNCTIONS
- TO SET UP COMMON LINE CUT



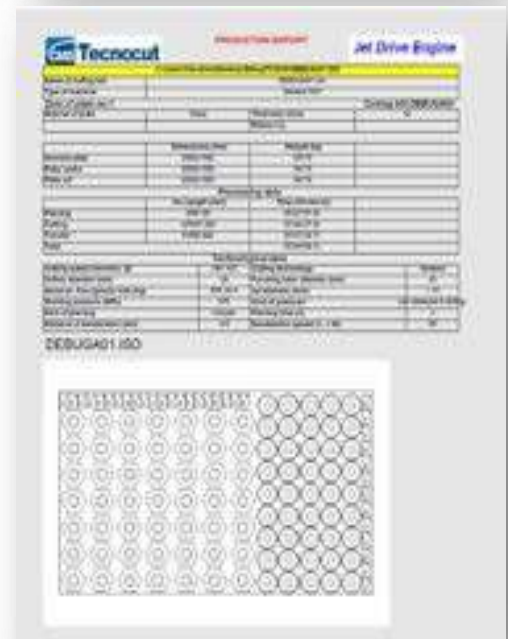
CREATION OF CUTTING PROGRAMS (ISO) AND TAPER CORRECTION (JDE)

THIS MODULE PROVIDES – THROUGH THE JDE (TAPER CORRECTION MODULE) – AN ISO CODE FOR 3 AND 5 AXES, MULTI-HEAD AND PIPE PROCESSING, MANAGING THE JET ALONG THE CUTTING PATH AND ITS ALTERATIONS DUE TO THE CUT ITSELF (SPEED, ACCELERATIONS AND SLOWING DOWN, MATERIAL TYPE AND THICKNESS).



RECAP OF CUT PERFORMANCE

THIS PROVIDES THE USER WITH A CHANCE TO CREATE A PRODUCTION REPORT AS WELL AS A PRODUCTION FORECAST ABOUT CUTTING TIME AND COST. A SIMPLE INTERFACE SHOWS INFORMATION ABOUT THE NESTING, THE CUTTING PARAMETERS AND THE EXPECTED PRODUCTION COST, BOTH FOR THE MACHINE AND THE MATERIAL. AS THE ISO HAS BEEN CREATED, THE CUTTING PATH CAN BE CHECKED THROUGH A REPRODUCTION OF THE CUTTING MACHINE CNC



INTERFACE WITH EXTERNAL SYSTEMS

THE MATERIALS DATABASE AND JDE MODULES ALLOW TO WORK WITH EXTERNAL CAD/CAM SYSTEMS, SO AS TO INTEGRATE CMS' KNOW-HOW INTO OTHER SYSTEMS.

