

# Taegu News

TAEGUTECH INDIA EMAIL NEWSLETTER

## Case Study

### CHASE10MILL FACE MILLING

#### 10 Cutting Edge Solution for High Feed Milling

#### The Customer Challenge

The customer was using a DIA 32 high feed cutter for rough cavity and side wall machining of a soft material die blocks. The customer was facing the following challenges:

- Low metal removal rate (MRR) due to lower  $Z_{eff}$  and feed rate
- High tooling cost per component due to lower insert life and fewer cutting edges
- High machine cost per component due to longer cycle time
- High inventory cost due to different cutters for different diameters
- High competition from other suppliers offering similar solutions

Chase10Mill is a revolutionary high feed cutter that features 10 cutting edges per insert, a unique design that enables higher  $Z_{eff}$  and lower cutting forces, and a wide range of end mills & shell milling cutter diameters starting from 20 mm -. Chase10Mill is ideal for roughing & cavity milling operations on various materials, especially die and Mold applications.



## The TaeguTec Solution

We proposed the customer to switch to Chase10Mill for the same operation.

The benefits of Chase10Mill include:

- **Higher MRR due to higher Zeff and feed rate**
- **Lower tooling cost per component due to higher insert life and more cutting edges**
- **Lower machine cost per component due to shorter cycle time**
- **Lower inventory cost due to common cutter for different diameters**
- **Unique product with 10 cutting edges**

We conducted a test at the customer's site using a HWACHEON UH500 machine with BBT40 spindle and compressed dry air coolant. The test parameters and results are shown in the table below.

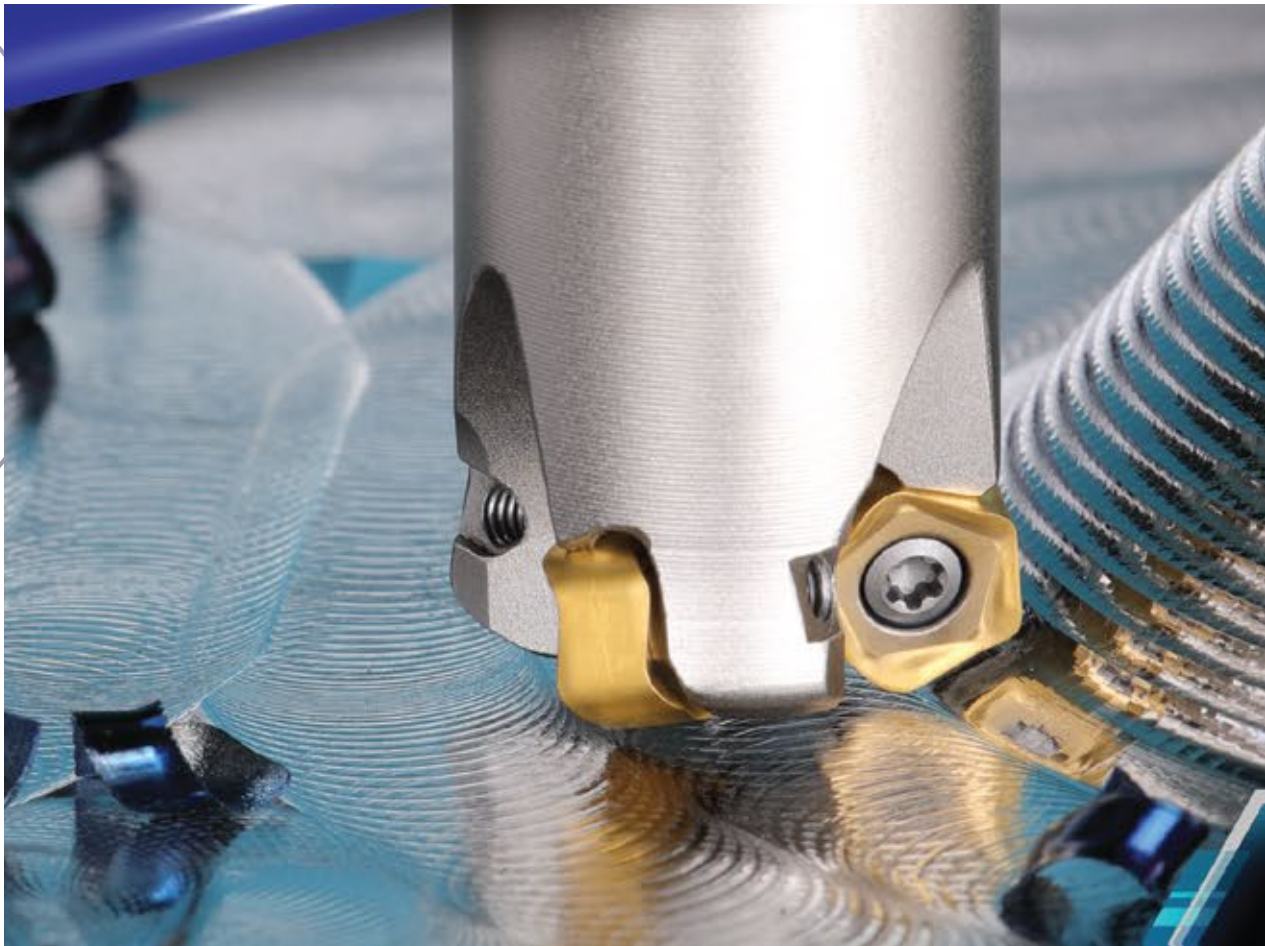
Parameter	Competition	TaeguTec
Cutter	DIA 32 Z=4	EPT 532-32-05-L200 DIA 32 Z=5 High feed end mill @25 degree approach
Insert	PVD Coated 3 corner positive insert	PTKU 0503 R-M TT9080 10 corner negative insert
Vc (m/min)	110	130
Diameter of cutter (mm)	32	32
Z	4	5
RPM	1095	1294
Fz (mm/tooth)	0.6	0.95
F/rev	2.4	4.75
Table Feed (mm/min)	2627	6150
Ap (mm)	0.5	0.6
Ae (mm)	20	20
Cut time/ component (Mins)	93	51
Life/edge (hours)	1.5	2
No. of corners	3	10
Life/ Insert set (Hours)	4.5	20
MRR (cm <sup>3</sup> /min)	26.3	73.8

As you can see, Chase10Mill achieved 180% improvement in MRR, 45% reduction in cycle time, 58% reduction in tooling cost per component, 44% reduction in machine cost per component, and 49% reduction in overall CPC per component.

Based on MRR benefits, per edge life improvement, per edge cost comparison, it was a compelling option for the the customer and they decided to invest in TaeguTec's SFeedTec CHASE10MILL (PTKU) solution.

If you want to experience the same benefits as this customer, don't wait any longer. Contact your nearest TaeguTec representative today and ask for a demo of Chase10Mill. You will be amazed by the results.

Chase10Mill: The only high feed cutter you need.



[For an Enquiry, click here](#)

