

DEEP BORE PLUMBER TILE CRUNCHER

AHMAD RAZLEE BIN AB KADIR

AZREN BIN AHMAD

MOHD ZAINUDDIN BIN MAT ZAIN

MUHAMMAD SHAHRUZAMAN

MUHAMMAD MUIZUDDIN

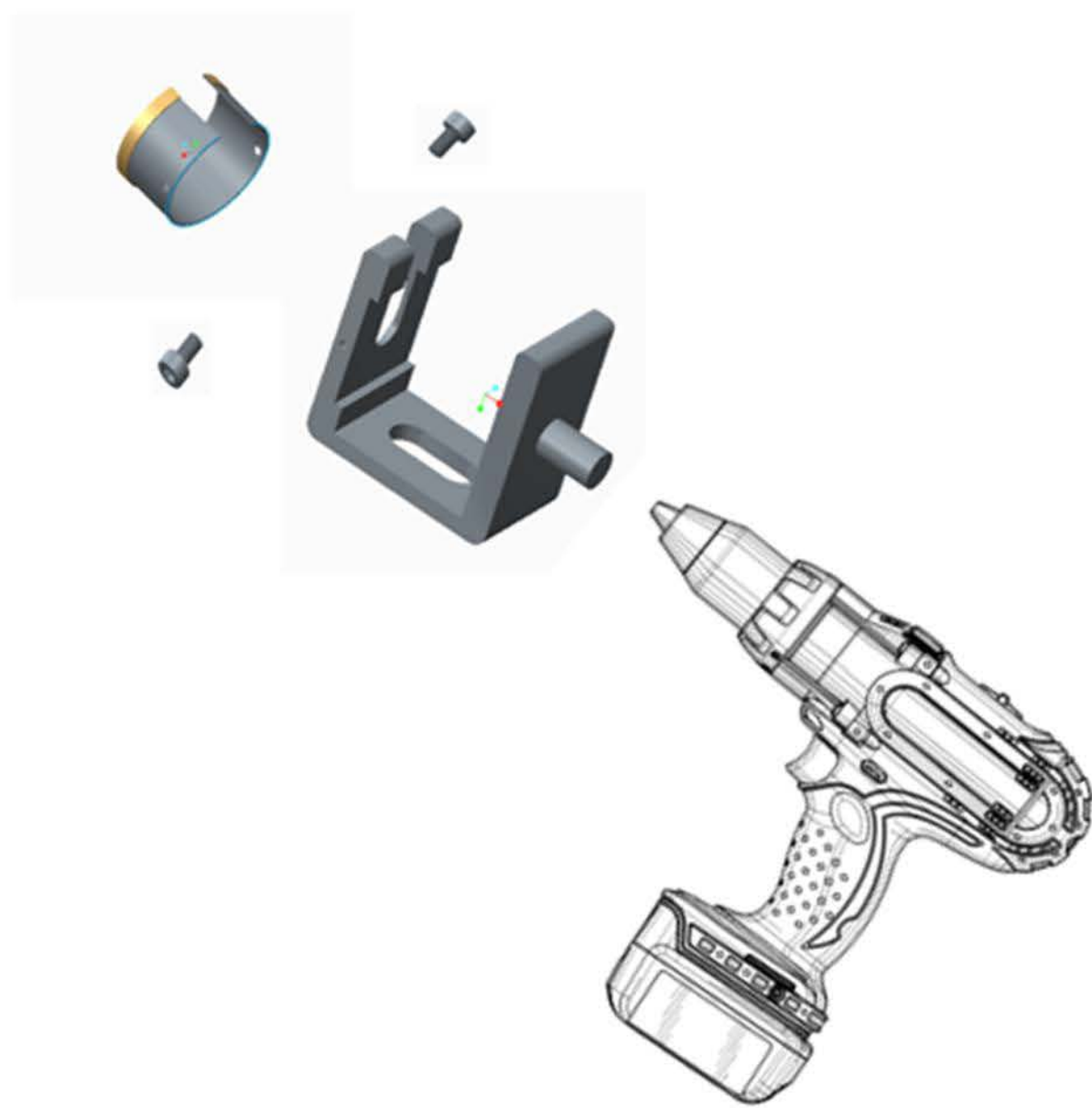


PROBLEM STATEMENT

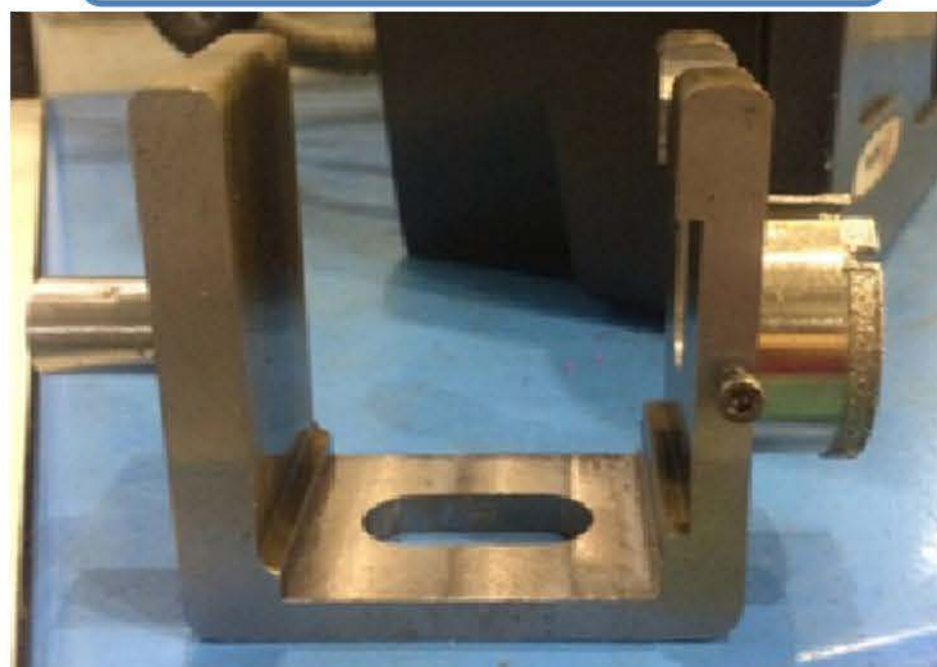


Increase Time AND Money
High Risk
Difficult to Clean Construction Area
More Dust... More Noise... More Work Load

CAD MODELING



FINAL PRODUCT



OPERATION COST AND TIME

BIL	ITEM	COST (RM)	TATOL COST
1	LABOUR COST	RM15.00 per HOUR	RM30.00
2	BROKEN TILE	RM1.50 pcs	RM3.00
3	CEMENT	RM3.00 per KG	RM3.00
4	BLACK RUBBER	RM0.50	RM0.50
TRADISIONAL			RM36.50

ITEM	TRADI-SIONAL METHOD	SUBCON-TRACTOR	DEEP BORE TILE CRUNCHER
COST	RM36.50	RM100++	RM5.50
TIME	1-2 hour	1 day	3 min

ABSTRACT

Taps are commonly used tools in the last few hundred years and are essential for everyday use. It is used significantly in many regions of the world and continues to be an important building system until now. These components have evolved over the centuries as our scientific understanding of their performance. Now there are problems that were identified when the screw on taps embedded in the wall of the toilet and the tiles. A tool has been created and named **DEEP BORE PLUMBER TILE CRUNCHER** for ease of removing tile and cement.

RESEARCH AND PRODUCT DEVELOPMENT

Countering the mentioned problem in plumbing system, the project conducted was initiated with a few objectives, they are:

To design new tile cruncher for plumber (CATIA)

To carry out testings on the design to ensure quality and the effectiveness of the Deep Bore Plumber Tile Cruncher.

NOVELTY AND UNIQUENESS

Deep Bore Tile Cruncher is very helpful for corner pipe or a maintenance unit to open the taps, especially those embedded in the wall or have a narrow space. In addition, it **save energy** and it also helps **reduce repair cost** and **time** as well as **avoid the damage to the wall surface** or tile.

POTENTIAL COMMERCIALIZATION

Based on the anticipated needs that Deep Bore Plumber Tile Cruncher can fulfill, it will easily penetrate the market as a tool to help plumbers to easily open the pipes that are installed on wall. As so, based on the number of buildings, including homes, schools, office or factory and the difficulties faced by a plumber; the market potential of this "Deep Bore Plumber Tile Cruncher" is expected to be high.

User Friendly (Best Ergonomics Device)

Reduce Time AND Money

Low Risk for Injury (Best Safety Device)

Easy to Clean Construction Area

No Pollution... Reduce Noise and Dust... Reduce Work Load

BIL	ITEM	COST(RM)	TOTAL COST
1	BROKEN TILE	-	-
2	BEEP BORE TILE CRUNCHER	RM 15	RM5.00
3	BLACK RUBBER	RM0.40	RM0.50
DEEP BORE TILE CRUNCHER			RM5.50

