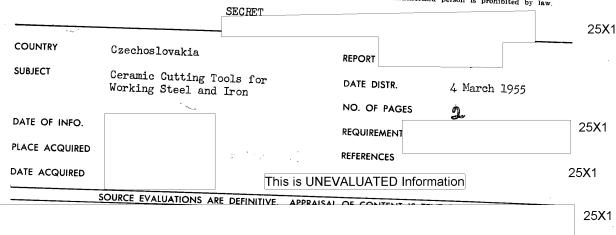# INFORMATION REPORT   INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

This material contains information affecting the National Defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

SECRET

25X1

COUNTRY	Czechoslovakia	REPORT	
SUBJECT	Ceramic Cutting Tools for Working Steel and Iron	DATE DISTR.	4 March 1955
		NO. OF PAGES	2
DATE OF INFO.		REQUIREMENT	25X1
PLACE ACQUIRED		REFERENCES	
DATE ACQUIRED			25X1

This is UNEVALUATED Information

SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS ~~~

25X1

25X1

1. On a tour of Czechoslovak machine plants, ceramic cutting tools were seen being used in two locations; one place was TOS Kurim and the other was the Research Institute for Machine Tools and Cutting Work (Vyzkumny ustav obrabecich stroju a obrabeni), at Na Zertvach 24, Prague VIII.

2. The cutters are made of slag ceramic material and are produced (sic) by Czechoslovak Ceramics in Prague.[1] The cutter's size and shape are the same as those of the interchangeable hard metal cutter which is manufactured by various Western firms. The cutter holder is manufactured in just about the same way as the Western ones are.

3. The advantage of using this cutter is that the tool does not have to be refaced. The ceramic cutter, it has been estimated, will be so inexpensive to manufacture that when one of them wears out it will be better to replace it with a new one rather than use hard-metal cutters which must be refaced (reground). When working in steel, it is said that the same cutting speed is reached as when using hard-metal cutters under the same conditions. When working with cast iron, the speed is said to be double that obtained by working it with hard-metal cutting tools. The life of the cutting edge when working on cast iron may be estimated to be about one hour. A ceramic cutting tool with a square section should thus be usable for eight hours, in view of the fact that one could turn the cutting edge, i.e., change it.

4. This ceramic cutting tool was developed in Eastern Europe and, as far as the informant knows, has never been used in Western Europe. Informant was told in Prague that practical tests with ceramic cutting tools have been going on for six months.

1 Comment: Czechoslovak Ceramics (Ceskoslovenska keramika) is the government-controlled foreign trade corporation for the export and import of ceramic goods in Prague.

25X1

SECRET

STATE	X	ARMY		X NAVY		X	AIR		X.	FBI		AEC		ORR Ev x		

(Note: Washington distribution indicated by "X"; Field distribution by "#".)

INFORMATION REPORT   INFORMATION REPORT

25X1

Page Denied