

PACKAGE ID - 001031SUN0000 XFLOW

KWIC TITLE - Crossflow Cooling Analysis Program

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LIMITATION CODE -UNL **AUDIENCE CODE** - UNL

COMPLETION DATE - 05/01/1992 **PUBLICATION DATE** - 05/01/1992

DESCRIPTION - Crossflow cooling analysis program to predict pressure drops and temperature rises in the annular and main cooling channels of collider dipole magnets (The upper channels are orificied at the inlet, the lower channels at the exits). Used in the analysis, design, and optimization of crossflow cooling for superconducting magnets.

PACKAGE CONTENTS - Media Directory; Software Abstract; READ.ME File (4 pages); Media Includes Source Code, Executable Module, Object Module, Sample Problem Input and Output;

SOURCE CODE INCLUDED? - Yes

MEDIA QUANTITY - 1 CD Rom

COMPUTER - SUN

OPERATING SYSTEMS - Sun OS, VAX/VMS, MS-DOS, etc.

PROGRAMMING LANGUAGES - Fortran 77

SOURCE CODE AVAILABLE (Y/N) - Y

OTHER PROG/OPER SYS INFO - Compile and link xflow.f, descol.f, dnsqe.f and rkf45.f; then run the executable. File formats are given in README file in 'doc' directory

HARDWARE REQS - Required memory: The executable size for Sun OS is approximately 270 Kb.

ABSTRACT STATUS - Released AS-IS 7/10/95.

SUBJECT CLASS CODE - VH

KEYWORDS -

COMPUTER PROGRAM DOCUMENTATION
X CODES
SUPERCONDUCTING SUPER COLLIDER
SUPERCONDUCTING MAGNETS
PRESSURE DEPENDENCE
TEMPERATURE DEPENDENCE

E S T S C
ENERGY SCIENCE & TECHNOLOGY SOFTWARE CENTER
SOFTWARE ABSTRACT

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COOLING
HEAT TRANSFER
MAGNETIC DIPOLES

EDB SUBJECT CATEGORIES -
990200 430303

SPONSOR - DOE/ER

PACKAGE TYPE - AS - IS