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Autore	Dixon S. L (Sydney Lawrence)
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7.11 The Diffuser System 7.12 Choking In a Compressor Stage; Problems; 8.1 Introduction; 8.2 Types of Inward-Flow Radial Turbine; 8.3 Thermodynamics of the 90° IFR Turbine; 8.4 Basic Design of the Rotor; 8.5 Nominal Design Point Efficiency; 8.6 Mach Number Relations; 8.7 Loss Coefficients in 90° IFR Turbines; 8.8 Optimum Efficiency Considerations; 8.9 Criterion for Minimum Number of Blades; 8.10 Design Considerations for Rotor Exit; 8.11 Significance and Application of Specific Speed; 8.12 Optimum Design Selection of 90° IFR Turbines; 8.13 Clearance and Windage Losses
8.14 Cooled 90° IFR Turbines

Sommario/riassunto

Turbomachinery is a challenging and diverse field, with applications for professionals and students in many subsets of the mechanical engineering discipline, including fluid mechanics, combustion and heat transfer, dynamics and vibrations, as well as structural mechanics and materials engineering. Originally published more than 40 years ago, Fluid Mechanics and Thermodynamics of Turbomachinery is the leading turbomachinery textbook. Used as a core text in senior undergraduate and graduate level courses this book will also appeal to professional engineers in the aerospace, glob
