1. Polyamide yarn HT

1.1 The yarn must be made of multifilament polyamide 6,6 high tenacity type (H.T.). It can be obtained either by direct extrusion or by multiple combination of basic yarns.

1.2 The technical characteristics of the yarn must be those shown in the following tables (from 1.2.1 to 1.2.4):

Table 1.2.1.

Yarn – linear density
• Linear density of the yarn, in denier (den), must be indicated in the list of materials subject to the order.
• The tolerance on linear density must be ± 5%, compared to that required (for parallel base yarns) and ± 8% (for combined yarns).

Table 1.2.2.

Tenacity	
The tenacity of the yarns, conceived as the ratio between breaking load in gram-force and actual linear density in denier, must be contained within the following limits for the indicated fields:	
Linear density	**Tenacity**
parallel yarn : until 2.200 den	≥ 9 gr/den
combined yarn: 5.000 ÷ 40.000 den	≥ 7,5 gr/den
Parallel yarn, once twisted, must guarantee a tenacity not lower than 7.5 g / den.	

Table 1.2.3.

Twist direction
• The twist direction (S or Z) must be that indicated in the list of materials subject to the order. The number of turns is not significant.

Table 1.2.4.

Characteristics of the packages
• Parallel yarns must be made up of conical or cylindrical bobbins or tubes of material possibly disposable as urban waste; • Combined yarns must be made on cylindrical bobbins, formed on cardboard tubes or material possibly disposable as urban waste, having the following dimensions: • Spool sizes: ✓ spool diameter 250 ÷ 300 mm. extremes included ✓ spool length 250 ÷ 300 mm. extremes included ✓ internal spool diameter between 50 and 60 mm. • All packages must be palletized, wrapped with a stretch film of suitable material and the platforms must not exceed the weight of 1,000 kg.

2. SELF –CERTIFICATION OF THE SUPPLIER COMPANY

The company supplying the yarn will have to deliver also a Control / Test Report showing the response of the material supplied to the technical and product characteristics referred to in the previous point 1.

3. TESTS

3.1 The yarn testing tests will be carried out by Stabilimento Militare Produzione Cordami (SMPC).

3.2 The reels of sampling will be taken by SMPC from the material supplied.

3.3 All the characteristics indicated in the tables 1.2.1 ÷ 1.2.4 must be verified.

3.4 All the tests necessary for the verification of the characteristics referred to in paragraph 3.3 will be carried out by operating on a sample consisting of 1 (one) complete package for every 100 (one hundred) packages supplied and, in any case, from a number of packages not less than 5 (five).

3.5 The value of the average linear density, ie the average of the average values of the tex recorded on each package, must be included in the permitted tolerances.

3.6 The average tenacity will be given by the average of the values measured on each package. The expression of average tenacity is given by the ratio between the average breaking load, expressed in gram-force and the average linear density expressed in deniers (den).

3.7 At least 10 (ten) tests will be carried out on the bobbins making up the sampling for the determination of the average breaking load.

3.8 If, during the tests, only one of the values described above (linear density and / or tenacity) should be lower than specified, the tests will be repeated on a double number of samples taken as required by the test commission. In the event of non-compliance with one of the values mentioned above, the material will be refused upon acceptance.

3.9 SMPC reserves the right to take samples, from the yarn used for the test, for chemical / commodity analyzes aimed at ascertaining that the nature of the material corresponds to that requested. For analysis, SMPC will use a public laboratory. In case of negative results, the material will be refused.

Note: The quantities of yarns ordered must be construed as net (ie not considering the weight of the tubes and all the materials needed for packaging).