UMANA
Biomechanical Analysis Centre

C-36-001498

BIOMECHANICAL QUALITY CERTIFICATE

UMANA
Biomechanical Analysis Centre (C-36-001498)

CERTIFIES
that the

3.60 TASK CHAIR

developed and marketed by
GRUPO FORMA 5 S.L.U.

provides a
GOOD [7.11 points]
ergonomic design

for the user's health and comfort in the standard seating position, regarding thermal behaviour, contact comfort, and lumbar spine deformation (as specified in the technical annex).

UMANA guarantees the accuracy and objectivity of the biomechanical tests, which have been carried out under strict study protocols and which allow obtaining values for the analytical parameters in a direct, instrumental manner without human intervention.

Technical Director
Xavier Alfonso Cornes

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C.I.F. B-36.970.226

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TECHNICAL ANNEX

Detailed biomechanical quality evaluation of the 3.60 task chair (FORMA 5) in standard posture

Biomechanical Parameter			Value	Explanation of results
Overall Evaluation			**Good**	The 3.60 task chair averaged 7.11 points out of 10, which, in terms of comfort and health for the users, confirms its good biomechanical performance regarding thermal behaviour, contact comfort, and lumbar spine deformation.
Thermal	Satisfactory [5.75]	**Seat**	Satisfactory	(1) The seat presents a satisfactory thermal behaviour for the support of the user's buttocks and thighs, since **it generates a maximum epithelial temperature of 33.8 °C**. (2) This maximum temperature falls within the range of comfort.
		Backrest	Satisfactory	(1) The backrest presents a satisfactory thermal behaviour for the support of the user's back, since **it generates a maximum epithelial temperature of 33.8 °C**. (2) This maximum temperature falls within the range of comfort.
Pressure	Very Good [8.39]	**Seat**	Good	(1) The seat presents a good elastic behaviour for the support of the user's buttocks and thighs, since **it generates average pressures of 23.4 mmHg, and maximum pressures of 66.6 mmHg.** (2) These pressure values fall within the range of high comfort.
		Backrest	Very Good	(1) The backrest presents a very good elastic behaviour for the support of the user's back, since **it generates average pressures of 5.9 mmHg, and maximum pressures of 20.4 mmHg.** (2) These pressure values fall within the range of maximum comfort.
Spine	Good [7.25]	**Lumbar**	Good	(1) The backrest presents a good performance for the lumbar region support, since it generates **average angle deformations of -35.5% in the lumbar vertebral units**. (2) These deformations fall within the range of comfort.

User type (percentile/back/weight)	Biomechanical evaluation of the 3.60 task chair	
	(0-10)	Evaluation
P10/kyphosis/light	7.36	Good
P50/neutral/average	7.05	Good
P90/lordosis/heavy	7.05	Good
AVERAGE	**7.11**	**Good**

Very good	<8
Good	6.5-8
Satisfactory	5-6.5
Average	2.5-5
Poor	<2.5