

## **Specialist DSE Assessment**

**Name of Client:** Ms NC  
**Date of Birth:** 01/01/1980  
**Job title:** Data Collection Manager  
**Employer:** Crow Industrial Enterprises

**Referred by:** Mr Tank (HR Manager)

**Address:**  
Crow Industrial Enterprises  
Calmaty Road  
Redditch  
B100

**Assessment Date:** 11/11/2019  
**Date of report:** 19/11/2019

**Technical Consultant/Physiotherapist:** Lasse Flosand (MCSP, MSc Ergo)

### **RELEVANT HISTORY**

As you know, Ms NC reports 12 months history of neck, shoulder and upper back discomforts and tension.

It is understood that she has seen a private Physiotherapist in the last 12 months, and that she also recently has seen a Chiropractor for her musculoskeletal problems. Unfortunately she has seen limited effect with such treatment and is finding that her symptoms are affecting her most days.

In particular Ms NC reports to feel quite uncomfortable seated at her work station. Prolonged sitting aggravates her neck, shoulder and upper back symptoms. She reports that moving about and stretching helps improve on her back and shoulder discomforts.

It is understood that she has required no time off due to this problem whilst working for Crow Industrial Enterprises.

Ms NC is 5ft 2" in height, reports to have 20/20 vision and to partially be able to touch type.

## **WORK SITUATION**

Ms NC works full time (37.5 hours a week) as Data Collection Manager at Crow Industrial Enterprises, Redditch. Her normal work hours are between 08:00 to 16:00 on Monday to Friday. It is understood that she normally works from home on a Monday.

During her working day she normally has a 20-25 minutes lunch break. She reports to be able to take breaks when and if required to have a stretch and move about, have a cup of tea etc. This helps her better manage her upper back, shoulder and neck discomforts.

Ms NC's primary work duties as Data Collection Manager involve analyzing business data. In addition she prepares such data analysis for publishing and reporting back to the business. She is also involved in matters revolving around data quality, assurance and diversity within the organization. It is understood that she can also partake in meetings, although the frequency of this varies from week to week.

As part of her job Ms NC finds that she spends the vast majority of her day (90%) seated at her work station, typing on her keyboard whilst using her mouse.

It is understood that she enjoys her job and finds her colleagues and employer supportive.

## **ASSESSMENT OF WORK AREA(S)/DISCUSSION**

### **Standard Provision:**

#### *Seat*

Ms NC sits in a standard Crow Industrial Enterprises Chair. The chair has several ergonomic features, such as seat slide, continuous free float mechanism and height adjustable arm rest. She is using a lumbar cushion for extra lumbar support and a foot rest.

Ms NC is of petite stature and the chair dimensions are somewhat on the large side for her. Also, she has increased postural requirements for lower back support due to the increased sway of her lower back. She is using a back cushion to provide some extra support in this regards. However, her current lumbar cushion is too large for her petite body dimensions. This means that her lower back posture is relatively flexed, even when using the back support, and her upper back posture unsupported. The result is a forward leaning spinal posture (see photo 1). Such postures typically require increased spinal and shoulder muscle action to maintain. Over time sustained muscle contraction can

lead to lactic acid build up in the musculature, which can aggravate pre-existing aches and pains.

At the time of the assessment her it was noted that Ms NC also sits too high on her chair and not sitting sufficiently close to her desk. This means that, when using her keyboard, mouse and computer screens, and her center of gravity is likely to shift forward. This will further encourage a forward leaning spinal and shoulder posture. As highlighted above, over time such postures can aggravate pre-existing back, neck and shoulder discomforts.

At the time of the assessment Ms NC was given advice on how to keep optimal spinal posture whilst seated, and also advised in continue taking regular breaks to move about. She was moved closer to her desk, her chair lowered and her back cushion adjusted. Her foot rest was removed, allowing her feet to rest on the floor.

The result was that she could lean back into her back rest in a more relaxed and enhanced spinal and shoulder posture (see photo 2). This posture reduces tension to her upper back, neck and shoulders, which over time will help reduce her symptoms.

Ms NC's current chair does, however, have shortcomings. Her upper back and neck remains unsupported. Also, due to her petite body dimensions and increased requirements to lumbar support it would be advisable to consider acquiring a chair fitting with her stature and specific postural requirements.

#### *Work Desk*

Ms NC's work desk is a standard Crow Industrial Enterprises desk, which is sufficiently large for all her work requirements and beyond that of the minimum requirements of the DSE regulations (1992). It has non-reflective surface, reducing glare from windows and ceiling lighting. The desk is 72 cm in height, which is just about the right height for Ms NC to be able to sit with her supported on the floor whilst achieving a good upper limb posture for typing and using her mouse.

The desk was found suitable for her postural and working requirements.

#### *Computer Screen (s)*

Ms NC's two LG work screens are 19" in width. Both screens were positioned somewhat too far away for her and also shifted to the left side of her desk.

This means that she will have to look to the left for a significant proportion of her day. When sustained, such rotated neck postures are likely to aggravate neck,

shoulder and upper back discomforts due to soft tissue overstretch of the neck and static muscle contraction of shoulder musculature.

At the time of the assessment Ms NC's screens were more to the center of her desk, immediately in front of her. The screens were also angled slightly inwards to give her more comfortable visual field. The result was neutral neck posture, and reduced tension to her shoulders. This will help reduce her neck, upper back and shoulder discomforts over time.

Ms NC reported no issues with the screen image quality, and the screen text was found comfortable to read. The screens were free of screen flicker or glare. The screens were found suitable for her working needs.

#### *Phone and Input Devices.*

Ms NC's Dell QWERTY keyboard and standard, infra-red Dell mouse were all found suitable for her postural and work requirements.

#### *Environment*

Ms NC reported no issues in relation to her working environment. Therefore the only considerations relate to standard health and safety aspects of temperature and lighting.

#### *Software*

Ms NC reported significant issues with the software she uses as part of her job.

### **Advice**

As part of the assessment Ms NC was advised in avoiding prolonged static postures both at work and at home. Continuing taking frequent short breaks away from her workstation, to move about, will help reduce discomforts.

She was instructed and advised in an optimal working postures and the importance of maintaining such posture more of the time both at home and at work. She was encouraged to continue being active outside of work, which is important to help reduce neck and upper back/shoulder discomforts.

Changes to her work station as highlighted above were introduced, which should help improve her work comforts and reduce the risk for back and shoulder discomforts.

She was also advised in some basic neck exercises that are designed to help reduce tension and enhance neck posture. By doing these on a regular basis they should help her see an improvement to her neck, upper back and shoulder discomforts.

**Photos**

<p><b><u>DELETED</u></b></p>	<p><b><u>Photo 1 (before adjustments)</u></b></p> <ul style="list-style-type: none"> <li>• Ms NC can be seen sitting with her screens positioned to the left side of her desk, encouraging a rotated neck posture.</li> <li>• Her chair was positioned too far away from her desk. This means that she has to lean forward to access her mouse and keyboard.</li> <li>• She was sitting too high on her chair, further encouraging a forward leaning spinal posture.</li> <li>• These factors and postures are likely to aggravate pre-existing musculoskeletal discomfort over time.</li> </ul>
<p><b><u>DELETED</u></b></p>	<p><b><u>Photo 2 (after adjustments)</u></b></p> <ul style="list-style-type: none"> <li>• Ms NC's screens were moved to the centre of the desk and angled slightly inwards to give her a better field of vision.</li> <li>• She was given advice in an optimal spinal posture.</li> <li>• Her chair was lowered and her foot rest removed.</li> <li>• Although at the end of the assessment she was sitting in a better posture the limitation of the current chair remains.</li> </ul>

**The assessment has highlighted the following issues:**

- Ms NC has experienced problems with her neck, shoulders and upper back for the last 12 months.
- Prolonged sitting at her work station aggravates her problems.
- The assessment identified some short comings with her work station set up, which was rectified at the time of the assessment (please see above for detail).
- Her current chair does not fit with her petite stature and the sway of her lower back (lumbar lordosis). Also, the chair provides limited support for her upper back when using her back cushion.

## **RECOMENDATIONS**

- Ms NC would benefit from a different chair with an adjustable and fixable back rest. The chair would benefit from having inflatable lumbar support and height adjustable arm rests.

The back rest has to be adjustable to 560 mm in height, with the lumbar apex adjustable to 250 mm in height. She will benefit from inflatable lumbar support. The depth of the seat needs to be no more than 500 mm. The height adjustability needs to be between 420 – 500 mm in height.

Due to her very specific body dimensions, a bespoke designed chair is the best option. Opera chairs are examples of such a bespoke chair:

- The Opera 60-5 with short gas stem and height/depth adjustable arm rests at £455.00 (Excl VAT) would fit well with the above description

<https://www.backcs.co.uk/opera-60-5//>

- There are otherwise no further recommendations.

*Thanks and Best Regards*



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*Lasse Flosand (MCSP, MSc Ergonomics)  
Physiotherapist in Occupational Health  
Nordic Rehab Ltd*

*Please note that Ms NC agreed with the content of this report and the distribution of this to her employer.*